State of California

THE RESOURCES AGENCY

Department of Water Resources

BULLETIN No. 130-64

HYDROLOGIC DATA: 1964

Volume I: NORTH COASTAL AREA

MARCH 1966

HUGO FISHER
Administrator
The Resources Agency

EDMUND G. BROWN
Governor
State of California

WILLIAM E. WARNE
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ORGANIZATION OF BULLETIN NO. 130 SERIES

Volume I - NORTH COASTAL AREA

Volume II - NORTHEASTERN CALIFORNIA

Volume III - CENTRAL COASTAL AREA

Volume IV - SAN JOAQUIN VALLEY

Volume V - SOUTHERN CALIFORNIA

Each volume consists of the following:

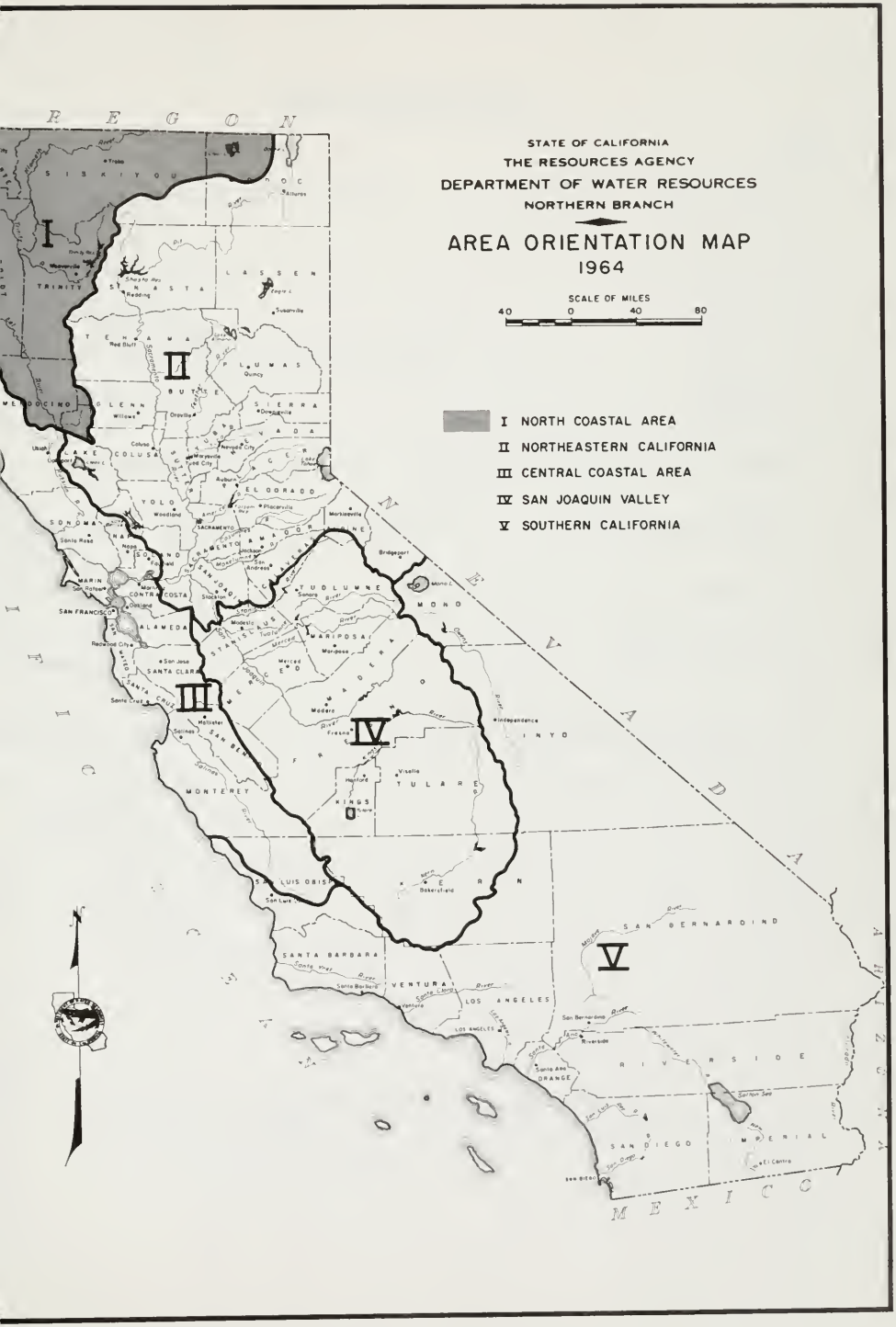
Appendix A - CLIMATE

Appendix B - SURFACE WATER FLOW

Appendix C - GROUND WATER MEASUREMENTS

Appendix D - SURFACE WATER QUALITY

Appendix E - GROUND WATER QUALITY


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
NORTHERN BRANCH
AREA ORIENTATION MAP
1964
SCALE OF MILES
40 0 40 80
I NORTH COASTAL AREA
II NORTHEASTERN CALIFORNIA
III CENTRAL COASTAL AREA
IV SAN JOAQUIN VALLEY
V SOUTHERN CALIFORNIA
OREGON
NEVADA
ARIZONA
MEXICO
PACIFIC OCEAN
SISKIYOU
TRINITY
SHASTA
LASSEN
TEHAMA
PLUMAS
MENDOCINO
BUTTE
SIERRA
GLENN
NEVADA
LAKE
COLUSA
PLACER
EL DORADO
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SONOMA
SACRAMENTO
AMADOR
NAPA
SOLANO
ALPINE
TUOLUMNE
MARIN
CONTRA COSTA
MONO
SAN FRANCISCO
ALAMEDA
MARIPOSA
SAN JOSE
SANTA CLARA
MERCED
INYO
MONTEREY
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TULARE
SAN LUIS OBISPO
KERN
SAN BERNARDINO
SANTA BARBARA
VENTURA
LOS ANGELES
RIVERSIDE
SANTA ANA
ORANGE
SAN DIEGO
IMPERIAL

METRIC CONVERSION TABLE

ENGLISH UNIT	EQUIVALENT METRIC UNIT	
Inch (in)	2.54	Centimeters
Foot (ft)	0.3048	Meter
Mile (mi)	1.609	Kilometers
Acre	0.405	Hectare
Square mile (sq. mi.)	2.590	Square kilometer
U. S. gallon (gal)	3.785	Liters
Acre foot (acre-ft)	1,233.5	Cubic meters
U. S. gallon per minute (gpm)	0.0631	Liters per second
Cubic feet per second (cfs)	1.7	Cubic meters per minute

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(Bound at back of bulletin)

PARTMENT OF WATER RESOURCES
BOX 388
RAMENTO

December 20, 1965

Honorable Edmund G. Brown, Governor,
and Members of the Legislature of
The State of California

Gentlemen:

The Bulletin No. 130 series of reports incorporates data on surface water, ground water, and climate previously published annually in Bulletin Nos. 23, 39, 65, 66, and 77. With the inauguration of this series of reports, publication of the earlier reports is suspended. This is the second in the new series of reports.

Bulletin No. 130 will be published annually in five volumes, each volume to report hydrologic data for one of five specific reporting areas of the State. The area orientation map on page iii delineates these areas.

This report is Volume I, "North Coastal Area". It includes five appendixes of detailed hydrologic data: Appendix A, "Climate", Appendix B, "Surface Water Flow", Appendix C, "Ground Water Measurements", Appendix D, "Surface Water Quality", and Appendix E, "Ground Water Quality".

The collection and publication of data such as is contained in Bulletin No. 130 is authorized by Sections 225, 226, 228, 229, 232, 345, 12609, 12616, and 12622 of the State of California's Water Code.

The basic data programs of the Department of Water Resources have been designed to supplement the activities of other agencies, in order to satisfy specific needs of this State. Bulletin No. 130 is designed to present useful, comprehensive, accurate, and timely hydrologic data to the public.

Collection of much of the data presented has been possible only because of the generous assistance of other agencies. I wish especially to acknowledge the help given by agencies whose measurements directly contributed to Bulletin No. 130-64. They include the United States Geological Survey, Forest Service, Weather Bureau, and the local County Farm Advisors of the Agricultural Extension Service, the California Department of Public Health, and the many local weather observers who have so unselfishly given of their time.

Sincerely yours,

William E. Warne

Director

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

EDMUND G. BROWN, Governor
HUGO D. FISHER, Administrator, The Resources Agency
WILLIAM E. WARNE, Director, Department of Water Resources
ALFRED R. GOLZE', Chief Engineer
JOHN R. TEERINK, Assistant Chief Engineer, Area Management

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NORTHERN DISTRICT

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Ernest G. Olsen . . . . . Surface Water Flow

Thomas I. Rausch . . . . . Ground Water Measurements

Harold B. German . . . . . .Water Quality

Reviewed and coordinated by
Statewide Planning Office
Data Coordination Branch

INTRODUCTION

The Department of Water Resources is concerned with the development and use of water supplies, and with the methods that are employed to observe and measure hydrologic conditions. Hydrologic data are used for the planned development of new water supplies including its uses for irrigation, drainage, hydropower, flood control, navigation, recreation, and fisheries enhancement; the operation of existing projects; and other associated engineering projects. The Department's hydrologic data programs have been designed to supplement and augment other agencies' activities to fulfill the specific needs of the Department and the State.

The tabulation on page 4 presents a summary of the active hydrologic data programs in the North Coastal Area during the 1963-64 fiscal and/or water year. The table specifies the origin of the programs, program objectives, program authorizations, the type of data collected, the collection agency, the frequency of measurement or service, and the total number of stations measured during 1963-64.

Hydrographic data activities, augmented by the climate data program, supplement streamflow observations carried on by the U. S. Geological Survey.

The climatologic data collected by the Department include information on precipitation, temperature, and evaporation. Both surface flow and recharge to ground water vary in direct response to precipitation. Evaporation is an important part of the consumptive use of water and, with other climatological events, affect conditions and use of a water supply.

Ground water is the source of supply for about one-half of the water beneficially used in California. However, the use of ground water in the

North Coastal Area is less extensive than in other areas of the State. Data on the current status of the major ground water basins is collected and processed within the framework of the Department's Ground Water Measurement Program. Field measurements are made by the U. S. Geological Survey. The review, processing, and editing of the data is performed by the Department. Since only a few wells are measured in any of the monitored ground water basins, it is difficult to derive meaningful values for the average changes in water level elevations.

Water quality is a measure of the characteristics of a water supply that affect the useability of the water. As greater demand is placed on available water supplies more effective use and reuse of the State's water becomes necessary. Since quality may limit the useability of a water, knowledge of quality conditions is necessary for the most efficient use of water supplies.

The Department's climatologic and surface water measurement stations have been selected to augment the basic hydrologic networks of the U. S. Weather Bureau and U. S. Geological Survey, respectively. The current federal hydrologic data programs are, in general, not sufficient to meet the many needs of the State.

Efforts are continuously being made to improve the quality and useability of both the federal government and State's hydrologic data networks. In some instances the weather data program has been hampered by relatively inaccessible mountainous areas and an inability to obtain the services of qualified local weather observers. The ground water data programs are continuously undergoing changes to provide a more accurate picture of ground water occurrences and associated quality makeup of the waters in the various defined ground water aquifers or zones.

The future conduct of the hydrologic data programs in the North Coastal Area, particularly with respect to the water quality activities, will be to reduce the frequency of measurements at a number of stations and continue to retain the quality of data currently obtained. An increasing effort is being made to more adequately define the ground water aquifers through geologic investigations. With this increased emphasis on the differentiation between the various ground water zones, the data collected can be made more useful and meaningful.

All of the hydrologic data programs are continually undergoing changes to existing networks to improve the quality and useability of the data.

SUMMARY OF HYDROLOGIC DATA IN THE NORTH COASTAL AREA, 1963-64

Program	Origin	Purpose	Authorization	Data			
				Type Collected	Collected by	Frequency Measured or Serviced	Number of Stations
Climatologic Data	1956	To maintain an inventory of historical climatological conditions to: (1) predict runoff; (2) plan and operate water projects; and (3) make all weather data available for ready use.	Secs. 228, 12609, 12616 of Water Code	Precipitation	Cooperators	Daily	54
				Precipitation	USWB	Daily	72
				Storage Gages	DWR	Annually	6
				Storage Gages	USWB	Annually	5
				Temperature	Cooperators	Daily	22
				Evaporation	Cooperators	Daily	2
				Evaporation	USWB	Daily	4
				Wind	USWB	Daily	3
Surface Water Measurement	1924	To provide an inventory of data on surface water which will be readily available for: (1) forecasting streamflow; (2) planning water development projects; (3) operation of flood control and multipurpose projects; and (4) formulation of agreements on water rights without expensive litigation.	Secs. 225, 226, 228, 12609, 12616 of Water Code	Streamflow	DWR	Serviced twice each month, measured monthly	8
Ground Water Measurement	1929	To compile representative ground water data, so that: (1) information will be readily available for future conjunctive operations; (2) appraisal can be made of drainage and overdraft problems; (3) local interest and cooperation will be stimulated; and (4) planning to develop the potential ground water basins can be facilitated.	Secs. 225, 226, 228, 12609 of Water Code	Depth to Ground Water	USGS	Monthly	36

Program	Origin	Purpose	Authorization	Data			
				Type Collected	Collected by	Frequency Measured or Serviced	Number of Stations
Surface Water Quality Data	1951	To compile representative surface water quality data to: (1) determine the quality of the State's surface waters; (2) detect changes in quality and alert control agencies when adverse changes occur; (3) determine trends; (4) record and catalogue the data in a readily available form; and (5) disseminate the data and information collected.	Sec. 226, 229, 12609, 12616 of Water Code	Mineral (complete mineral semiannually, partial mineral remaining months)	DWR	Monthly	25
				Spectrographic (heavy metals)	DWR	Semiannually	8
				Radiological	DWR	Semiannually	23
				Bacteriological	DWR	Monthly	14
Ground Water Quality Data	1953	To compile representative ground water quality data to: (1) establish existing ground water bodies; (2) determine the quality of the State's ground waters; (3) detect changes in quality and alert control agencies when adverse changes occur; (4) determine trends; and (5) provide for organization and ready dissemination of ground water quality data.	Sec. 226, 229, 12609, 12616, of Water Code	Complete and partial mineral	DWR and local county farm advisors	Annually	61
				Heavy Metals	Same	Selected intervals	7

APPENDIX A

CLIMATE

CLIMATE

The Department of Water Resources cooperates with the U. S. Weather Bureau and local agencies in the collection of climatological data. Climatological data programs are dependent, for the most part, on the cooperation of local observers. Data from selected key stations are published by both the Department and the U. S. Weather Bureau.

The tables in this appendix include total monthly and seasonal precipitation; monthly temperatures showing maximum, average maximum, average, average minimum and minimum temperatures; evaporation data showing the total evaporation for each month of the 1963-64 fiscal year; and total annual precipitation for the 1963-64 fiscal year as measured at the storage gages in the northern part of the State (so installed because of their extreme remoteness).

Most of the stations use standard meteorological equipment. Commonly accepted procedures are employed in summing up monthly totals and computing mean values. In the preparation of the mean seasonal isohyetal map (Plate 2) the long term mean values are based on the 50-year mean period 1905-06 to 1954-55, for those stations with sufficient length of record. At other stations all available records are used in determining the mean. Station density in the North Coastal Area is adequate for making reasonable estimates of average conditions over extended areas, with the possible exception of the areas in the higher altitudes.

A description of the tables and plates included in this appendix follows:

Table A-1, "Index of Climatological Stations", contains a listing of all active climatological stations in the North Coastal Area during the 1963-64 fiscal year. The station names are arranged in alphabetical order.

Each station is given a code number which is composed of two parts -- a drainage basin designation, and an Alpha Order Number which corresponds to the alphabetical sequence of the station with respect to the other stations in that drainage basin. A sub-number of two digits is occasionally affixed to the four digit Alpha Order Number. This is necessary to provide for greater flexibility as new stations are added to the listing. The cooperator index number is used when the Alpha Order Number is in conflict with the U. S. Weather Bureau number.

Other information is also given, including the year in which the record was begun, the year the record ended and the years of missing record. The code for the county in which the station is located is shown below:

County	Code
Del Norte	08
Humboldt	12
Mendocino	23
Modoc	25
Siskiyou	47
Trinity	53

Table A-2, "Precipitation Data", contains a listing of all precipitation measurements collected in the North Coastal Area during the 1963-64 fiscal year. The listing is in alphabetical order by station name. The table includes a summary of total seasonal precipitation and lists each monthly amount for the 1963-64 fiscal year.

Table A-3, "Temperature Data", describes air temperature data collected by the Department of Water Resources in the North Coastal Area. The stations are listed in alphabetical order. A listing by drainage basin and Alpha Order Number is also given. A column titled "Season" summarizes the extreme values of temperature reported at each station and also lists the mean of the monthly values. The maximum, average maximum, average, average

minimum and minimum monthly values are given for each station, and are based on 1963-64 data.

Table A-4, "Evaporation Data", describes the data collected from all evaporation stations in the North Coastal Area. This information is used to determine loss of water by evaporation from existing and proposed water storage and conveyance facilities. The stations are listed alphabetically. The table includes a listing of drainage and Alpha Order Numbers corresponding to the station names. Total evaporation is shown for each month during the 1963-64 fiscal year.

Table A-5, "Storage Gage Precipitation Data", presents the total 1963-64 seasonal precipitation at a number of storage gages located in remote regions in the North Coastal Area.

Plate 1, "Climatological Observation Station", shows the locations of all actively reporting climatological stations in the North Coastal Area. These include the U. S. Weather Bureau stations reported in the U. S. Department of Commerce monthly publication, "Climatological Data", and many stations operated by cooperative observers. A legend on the map describes the symbols used for the various types of measuring equipment and observations made.

Plate 2, "Mean Seasonal Precipitation", shows the rainfall pattern over the North Coastal Area. Lines of equal mean seasonal precipitation are drawn to define the normal amounts. The lines represent normals based on a 50-year mean period of 1905-06 through 1954-55.

TABLE A-1

INDEX OF CLIMATOLOGICAL STATIONS FOR 1963-64

NORTH COASTAL AREA

Station Number	Station Name	Elevation (in Feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude ° ' "	Longitude ° ' "	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
F6 0018	ADAMAC LODGE	1100	SEC 14	T23N	R17W	M	M	39 50 48	123 42 00	000		1950			23
F6 0088	ALDERPOINT	435	SEC 27	T03S	R05E		H	40 11 00	123 36 00	900		1940			12
F5 0253	ARCATA A P	200	SEC 19	T07N	R01E	O	H	40 58 18	124 05 24	000		1957			12
F3 0715	BESWICK 7 S	8140	SEC 33	T47N	R03W		M	41 52 00	122 14 00	900		1952			47
F4 0738	BIG BAR RANGER STA	1270	SEC 05	T33N	R12W		M	40 44 54	123 14 42	900		1943			53
F5 0764	BIG LAGOON	100	SEC 18	T09N	R01E	R	M	41 09 36	124 05 54	000		1958			12
F2 0786-01	BIG SPRINGS 4 E	2955	SEC 05	T43N	R04W	R	M	41 35 30	122 19 42	000		1960			47
F5 0901	BLUE LAKE	105	SEC 30	T06N	R02E	A	H	40 52 54	123 59 12	000		1951			12
F5 0903	BLUE LAKE REDWOOD CR	975	SEC 11	T06N	R03E		H	40 55 00	123 49 00	900		1956			12
F6 1046	BRANSCOMB 2 NW	1480	SEC 09	T21N	R16W	M	M	39 41 12	123 39 36	900		1959			23
F1 1050	BRAY 10 WSW	5759	SEC 24	T43N	R03W		M	41 34 00	122 08 00	900		1951			47
F6 1080	BRIDGEVILLE 4 NNW	2050	SEC 27	T02N	R03E		H	40 31 00	123 49 00	900		1954			12
F6 1083	BRIDGEVILLE P O	650	SEC 11	T01N	R03E	O	H	40 28 06	123 48 00	000		1959			12
F6 1181	BULL CREEK	410	SEC 36	T01S	R01E	H	H	40 21 00	124 06 30	000		1960			12
F6 1210	BURLINGTON ST PARK	200	SEC 12	T02S	R02E	O	H	40 18 30	123 54 24	000		1950			12
F4 1215	BURNT RANCH 1S	2150	SEC 23	T05N	R06E	E	H	40 47 48	123 28 48	900		1945			53
F4 1215-15	BURNT RCH HMS	1500	SEC 14	T05N	R06E	F	M	40 48 30	123 28 30	000		1963			53
F2 1316	CALLAHAN RANGER STA	3136	SEC 21	T40N	R08W		M	41 18 00	122 48 00	900		1943			47
F7 1505	CAPE RANCH	710	SEC 23	T01N	R03W	F	H	40 27 24	124 22 48	000		1959			12
F3 1606	CECILVILLE SAWYER	3000	SEC 12	T37N	R11W		M	41 06 00	123 03 00	900		1954			47
F6 1608	CEDAR CREEK HATCHERY	950	SEC 14	T23N	R17W	O	M	39 50 24	123 42 18	805		1957			23
F3 1709	CLEAR CREEK	975	SEC 07	T15N	R07E	H	H	41 42 30	123 26 54	900		1959			47
F4 1886	COFFEE CREEK RS	2500	SEC 06	T07W	R37N		M	41 05	122 42	900		1960			53
F3 1990	COPCO DAM NO 1	2700	SEC 29	T48N	R04W	P	M	41 59 00	122 20 00	900		1928			47
F6 2081	COVELO	1385	SEC 12	T22N	R13W		M	39 47 00	123 15 00	900		1921			23
F6 2084	COVELO EEL RIVER RS	1514	SEC 28	T23N	R11W		M	39 50 00	123 05 00	900		1939			23
F0 2147	CRESCENT CITY 1 N	40	SEC 20	T16N	R01W		H	41 46 00	124 12 00	900		1931			08
F0 2148	CRESCENT CITY 7 ENE	120	SEC 08	T16N	R01E		H	41 48 00	124 05 00	900		1913			08
F0 2150	CRESCENT CITY HMS	50	SEC 20	T16N	R01W		H	41 46 00	124 12 00	900		1941			08
F0 2152	CRESCENT CITY 11 E	360	SEC 30	T16N	R02E	B	H	41 45 18	123 59 30	000		1947			08
F1 2188	CROWDER FLAT	5175	SEC 20	T47N	R11E	K	M	41 53 00	120 44 00	000		1958			25
F6 2218	CUMMINGS	1270	SEC 21	T23N	R16W		M	39 50 00	123 38 00	900		1927			23
F1 2480	DORRIS INSPECT STA	4240	SEC 36	T48N	R01W	R	M	41 57 18	121 54 30	000		1959			47
F6 2490	DOS RIOS	927	SEC 31	T22N	R13E		M	39 43 00	123 21 00	900		1917			23
F0 2749	ELK VALLEY	1711	SEC 34	T19N	R04E		H	42 00 00	123 43 00	900		1938			08
F2 2899	ETNA	2912	SEC 28	T42N	R09W		M	41 28 00	122 54 00	900		1940			47
F7 2906	ETTERSBURG 2 SE	1370	SEC 16	T04S	R02E	D	H	40 07 12	123 58 18	000		1953			12
F6 2910	EUREKA WB CITY	43	SEC 22	T05N	R01W		H	40 48	124 10	900		1878			12
F7 3025	FERNDALE 8 SSW	1445	SEC 06	T01N	R02W	P	H	40 29 30	124 20 24	900		1959			12
F6 3030	FERNDALE 2NW	10	SEC 34	T03N	R02W	K	H	40 35 54	124 16 36	900		1963			12
F5 3041	FIELDBROOK 4 D RCH	285	SEC 36	T07N	R01E	P	H	40 56 36	124 01 06	000		1956			12
F3 3122	FOOTHILL SCHOOL	2960	SEC 25	T46N	R05W	F	M	41 48 42	122 22 18	000		1962			
F4 3130	FOREST GLEN	2340	SEC 22	T01S	R08E		H	40 23 00	123 20 00	900		1930			53
F3 3151	FORKS OF SALMON	1270	SEC 24	T10N	R07E	A	H	41 15 12	123 19 00	900		1959			47
F0 3173	FORT DICK 1 NNE	50	SEC 11	T17N	R01W		H	41 52 00	124 09 00	900		1951			08
F2 3176	FORT JONES 6 ESE	3324	SEC 12	T43N	R08W		M	41 35 00	122 43 00	900		1941			47
F2 3182	FORT JONES RANGER ST	2720	SEC 02	T43N	R09W	C	M	41 36 00	122 51 00	900		1936			47
F6 3194	FORTUNA	60	SEC 35	T03N	R01W	O	H	40 36 00	124 09 00	000		1956			12
F6 3217	FOX CAMP	2500	SEC 09	T02S	R01E	R	H	40 18 24	124 03 54	811		1960			12
F6 3320	GARBERVILLE	340	SEC 24	T04S	R03E		H	40 06 00	123 48 00	900		1938			12
F6 3322-01	GARBERVILLE MAINTSTN	540	SEC 24	T04S	R03E	G	H	40 06 00	123 47 40	809		1935			12
F0 3357	GASQUET RANGER STA	384	SEC 21	T17N	R02E	N	H	41 52 00	123 58 00	900		1940			08
F2 3361-03	GAZELLE - EPPERSON	2760	SEC 17	T43N	R06W	J	M	41 34 18	122 33 12			1950			47
F2 3362-03	GAZELLE ANNW	2730	SEC 16	T43N	R06W	C	M	41 34 42	122 32 42	000		1949	1964		47
F2 3363	GAZELLE LOOKOUT	5200	SEC 08	T41N	R07W	J	M	41 24 30	122 40 30	000		1956			47
F1 3564	GRASS LAKE HWY M S	5080	SEC 28	T44N	R03W	G	M	41 37 48	122 11 30	900		1954			47
F2 3614	GREENVIEW	2818	SEC 29	T43N	R09W		M	41 33 00	122 54 00	900		1943			47
F6 3647	GRIZZLY CRK REDWOOD	500	SEC 11	T01N	R02E		H	40 29 00	123 47 00	900		1963			12
F3 3761	HAPPY CAMP RANGR STA	1090	SEC 11	T16N	R07E		H	41 48 00	123 23 00	900		1914			47
F6 3785	HARRIS 7 SSE	1910	SEC 27	T05S	R05E	N	H	39 59 24	123 36 42	000		1953			23
F6 3810	HARTSOOK INN	470	SEC 24	T05S	R03E	D	H	40 00 48	123 47 30	000		1958			12
F4 3859	HAYFORK RANGER STA	2340	SEC 12	T31N	R12W	R	M	40 33 00	123 10 00	900		1915			53
F4 3949	HIDDEN VALLEY RCH	1978	SEC 32	T01N	R07E	M	H	40 24 54	123 24 30	000		1959			53
F6 3956	HIGH ROCK	900	SEC 15	T01S	R02E	K	H	40 22 48	123 56 30	808		1960			44
F3 3987	HILTS	2900	SEC 23	T48N	R07W		M	42 00 00	122 38 00	900		1939			47
F8 4037-02	HOLMES	150	SEC 33	T01N	R02E	R	H	40 25 06	123 57 06	000		1954			12
F7 4074	HONEYDEW 2 WSW	380	SEC 02	T03S	R01W	C	H	40 14 18	124 09 00	900		1953			12
F7 4074-01	HONEYDEW HUNTER	380	SEC 02	T03S	R01W	M	H	40 14 18	124 09 06	000		1955			12
F5 4077	HONOR CAMP 42	1875	SEC 31	T07N	R03E	K	H	40 56 48	123 52 42	000		1956			12
F4 4082	HOOPA	350	SEC 25	T08N	R04E		H	41 03 00	123 40 00	900		1941			12

TABLE A-1 (Continued)

INDEX OF CLIMATOLOGICAL STATIONS FOR 1963-64

NORTH COASTAL AREA

Station Number	Station Name	Elevation (in feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude °	Latitude '	Latitude =	Longitude °	Longitude '	Longitude =	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
F4 4084	HOOPA 2 SE	315	SEC	31	T08N	R05E	H	41	02	00	123	39	00	900		1954			12
F4 4191	HYAMPOM	1260	SEC	25	T03N	R06E	H	40	37	00	123	28	00	900		1940			53
F0 A202	IDLEWILD MAINT STN	1250	SEC	06	T17N	R04E	D	H	41	54	00	123	46	12	900		1946			08
F3 4577	KLAMATH	25	SEC	15	T13N	R01E		H	41	31	00	124	02	00	900		1941			08
F3 4583	KLAMATH RIVER 1 SW	1750	SEC	12	T46N	R09W	A	M	41	51	08	122	50	06	000		1958	1963		47
F4 4587	KNEELAND 10 SSE	2356	SEC	13	T03N	R02E		H	40	38	00	123	54	00	900		1952			12
F5 4602	KORBEL	150	SEC	28	T06N	R02E	R	H	40	52	00	123	57	30	900		1937			12
F6 4690	LAKE MOUNTAIN		SEC	21	T05S	R07E		M	40	01	00	123	24	00	900		1939			53
F1 4838	LAVA BEDS NAT MON	4770	SEC	28	T45N	R04E	H	M	41	43	48	121	30	30	900		1940		06	47
F6 4851	LAYTONVILLE	1640	SEC	01	T21N	R15W		M	39	42	00	123	29	00	900		1940			23
F5 4982	LITTLE RIVER	150	SEC	31	T08N	R01E	P	H	41	01	54	124	06	36	000		1949			12
F2 4984-02	LITTLE SHASTA	2725	SEC	26	T45N	R05W	C	M	41	43	00	122	23	00	000		1960			47
F1 5081-01	LONG BELL STATION	4375	SEC	20	T42N	R05E	B	M	41	28	00	121	25	00	000		1958			25
F5 5244	MAD RIVER RANGER STA	2775	SEC	17	T01N	R06E		H	40	27	00	123	32	00	900		1943			53
F7 5295-41	MANN RANCH	2200	SEC	35	T02S	R01E	E	H	40	15	24	124	02	48	811		1960			12
F1 5505	MEDICINE LAKE	6660	SEC	10	T43N	R03E		M	41	35	00	121	37	00	900		1946			47
F6 5676	MINA 3 NW	2875	SEC	28	T05S	R07E	A	H	40	00	06	123	23	30	000		1927			53
F6 5713	MIRANDA SPENGLER RCH	400	SEC	19	T03S	R04E		H	40	12	00	123	46	00	900		1939			12
F2 5783	MONTAGUE	2500	SEC	27	T45N	R06W	Q	M	41	43	42	122	31	36	000	045783	1868		05	47
F2 5785	MONTAGUE 3 NE	2640	SEC	18	T45N	R05W		M	41	45	00	122	28	00	900		1948			47
F1 5941	MOUNT HERRON R S	4250	SEC	32	T46N	R01W		M	41	47	00	122	00	00	900		1942			47
F4 6032	MUMBO BASIN	5700	SEC	35	T39N	R06W	E	M	41	12	00	122	32	00	900		1946			53
F6 6050	MYERS FLAT	175	SEC	30	T02S	R03E	J	H	40	15	42	123	52	00	000		1950			12
F6 6050-01	MYERS FLAT - CRANE																1963			12
F3 6328	OAK KNOLL RANGER STA	1963	SEC	12	T46N	R09W		M	41	50	00	122	51	00	900		1942			47
F6 6408	OLD HARRIS	2225	SEC	30	T04S	R05E	G	H	40	05	00	123	39	42	000		1956			12
F5 6497-01	ORICK 3 NNE	50	SEC	22	T11N	R01E	K	H	41	19	24	124	02	30	000		1950			12
F5 6497-02	ORICK ARCATA REDWOOD	75	SEC	22	T11N	R01E	K	H	41	19	24	124	02	36	000		1954			12
F5 6498	ORICK PRAIRIE CREEK	161	SEC	02	T11N	R01E		H	41	20	00	124	02	00	900		1937			12
F3 6508	ORLEANS	403	SEC	31	T11N	R06E		H	41	18	00	123	32	00	900		1885			12
F5 6745	PATRICKS PT STATE PK	250	SEC	26	T09N	R01W	L	H	41	08	12	124	09	00	804		1947			12
F7 6835-01	PETROLIA	175	SEC	03	T02S	R02W	L	H	40	19	30	124	16	48	000		1956			12
F7 6835-02	PETROLIA 4 NW	900	SEC	19	T01S	R02W	D	H	40	22	24	124	16	30	000		1953			12
F6 6851-15	PHILLIPSVILLE 15E	300	SEC	19	T03S	R04E	B	M	40	11	42	123	46	00	000		1963			
F6 6976	PLASKETT	6580	SEC	27	T22N	R09W	A	M	39	44	12	122	51	24	000		1980			11
F6 7404	RICHARDSON GROVE	500						H	40	02		123	47		900					12
F4 7698	SALYER RANGER STA	623	SEC	14	T06N	R05E		H	40	53	00	123	35	00	900		1931			53
F3 8025	SAWYERS BAR R S	2169	SEC	20	T40N	R11W		M	41	18	00	123	08	00	900		1931			47
F6 8045	SCOTIA	139	SEC	07	T01N	R01E		H	40	29	00	124	06	00	900		1926			12
F3 8083-01	SEIAD VALLEY R S	1371	SEC	11	T46N	R12W	R	M	41	50	36	123	11	42	905		1953			47
F7 8162	SHELTER COVE	55	SEC	16	T05S	R01E		H	40	02	00	124	04	00	900					12
F6 8163	SHERWOOD VALLEY	2170	SEC	32	T20N	R14W	F	M	39	32	36	123	26	30	901		1958			23
F0 8311-01	SMITH RIVER 2 WNW	195	SEC	21	T18N	R01W	A	H	41	56	30	124	10	42	000		1951			08
F0 8311-02	SMITH RIVER 7 SSE	60	SEC	30	T17N	R01E	F	H	41	50	24	124	06	36	000		1952			08
F3 8346	SOMESBAR 1W	520	SEC	04	T11N	R06E		H	41	23	00	123	29	00	900		1954			12
F6 8490	STANDISH HICKEY PARK	850	SEC	03	T23N	R17W	F	M	39	52	30	123	43	30	900		1950			23
F3 8919	TI BAR R S	710	SEC	08	T13N	R06E	L	H	41	31	48	123	31	30	905		1959			47
F4 9024	TRINITY DAM VISTA PT	2500	SEC	16	T34N	R08W		M	40	48	00	122	46	00	900		1959			53
F1 9053	TULELAKE	4035	SEC	06	T47N	R05E		M	41	58	00	121	28	00	900		1932			47
F1 9057	TULELAKE INSP STN	4408	SEC	31	T44N	R07E	F	M	41	36		121	12		000	049057	1953			25
F7 9177	UPPER MATTOLE	255	SEC	33	T02S	R01W		H	40	15	00	124	11	00	900		1886			12
F4 9490	WEAVERVILLE RANGER S	2050	SEC	12	T33N	R10W		M	40	44	00	122	56	00	900		1871			53
F2 9499	WEED 1 S	3630	SEC	11	T41N	R05W		M	41	25	00	122	23	00	900		1957			47
F6 9527	WEOTT 2SE	600	SEC	12	T02S	R02E	H	H	40	18	29	123	53	40	000		1961			12
F7 9654	WHITETHORN	1050	SEC	15	T05S	R02E	E	M	40	01	18	123	56	12	000		1962			12
F6 9684	WILLITS 1 NE	1350	SEC	17	T18N	R13W		M	39	25	00	123	21		900		1950			23
F6 9685	WILLITS HOWARD RS	1925	SEC	05	T17N	R13W		M	39	21	00	123	19	00	900		1955			23
F6 9686	WILLITS NW PAC RR	1365	SEC	18	T18N	R13W	L	M	39	24	12	123	21	06	006		1911			23
F6 9753	WITTS RANCH																1963			12
F2 9866	YREKA	2631	SEC	27	T45N	R07W		M	41	43	00	122	38	00	900		1871			47
F6 99A0	ZENIA 1 SSE	2880	SEC	22	T03S	R06E	G	H	40	11	18	123	28	54	000		1950			53

TABLE A-1

INDEX OF CLIMATOLOGICAL STATIONS FOR 1963-64

NORTH COASTAL AREA

Station Number	Station Name	Elevation (in feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude ° ' "	Longitude ° ' "	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
F6 0018	ADAMAC LODGE	1100	SEC 14	T23N	R17W	H	M	39 50 48	123 42 00	000		1950			23
F6 0088	ALDERPOINT	435	SEC 27	T03S	R05E		H	40 11 00	123 36 00	900		1940			12
F5 0253	ARCATA A P	200	SEC 19	T07N	R01E	Q	H	40 58 18	124 05 24	000		1957			12
F3 0715	BESWICK 7 S	6140	SEC 33	T47N	R03W		M	41 52 00	122 14 00	900		1952			47
F4 0738	BIG BAR RANGER STA	1270	SEC 05	T33N	R12W		M	40 44 54	123 14 42	900		1943			53
F5 0784	BIG LAGOON	100	SEC 18	T09N	R01E	R	H	41 09 36	124 05 54	000		1958			12
F2 0786-01	BIG SPRINGS 4 E	2955	SEC 05	T43N	R04W	R	M	41 35 30	122 19 42	000		1960			47
F5 0901	BLUE LAKE	105	SEC 30	T06N	R02E	A	H	40 52 54	123 59 12	000		1951			12
F5 0903	BLUE LAKE REDWOOD CR	975	SEC 11	T06N	R03E		H	40 55 00	123 49 00	900		1956			12
F6 1046	BRANSCOMB 2 NW	1480	SEC 09	T21N	R16W	M	M	39 41 12	123 39 36	900		1959			23
F1 1050	BRAY 10 WSW	5759	SEC 24	T43N	R03W		M	41 34 00	122 08 00	900		1951			47
F6 1080	BRIDGEVILLE 4 NNW	2050	SEC 27	T02N	R03E		H	40 31 00	123 49 00	900		1954			12
F6 1083	BRIDGEVILLE P O	650	SEC 11	T01N	R03E	Q	H	40 28 06	123 48 00	000		1959			12
F6 1181	BULL CREEK	410	SEC 36	T01S	R01E	H	H	40 21 00	124 06 30	000		1960			12
F6 1210	BURLINGTON ST PARK	200	SEC 12	T02S	R02E	D	H	40 18 30	123 54 24	000		1950			12
F4 1215	BURNT RANCH 1S	2150	SEC 23	T05N	R06E	E	H	40 47 48	123 28 48	900		1945			53
F4 1215-15	BURNT RCH HMS	1500	SEC 14	T05N	R06E	F	H	40 48 30	123 28 30	000		1963			53
F2 1316	CALLAHAN RANGER STA	3136	SEC 21	T40N	R08W		M	41 18 00	122 48 00	900		1943			47
F7 1505	CAPE RANCH	710	SEC 23	T01N	R03W	F	H	40 27 24	124 22 48	000		1959			12
F3 1606	CECILVILLE SAWYER	3000	SEC 12	T37N	R11W		M	41 06 00	123 03 00	900		1954			47
F6 1608	CEDAR CREEK HATCHERY	950	SEC 14	T23N	R17W	Q	M	39 50 24	123 42 18	805		1957			23
F3 1769	CLEAR CREEK	975	SEC 07	T15N	R07E	H	H	41 42 30	123 26 54	900		1959			47
F4 1886	COFFEE CREEK RS	2500	SEC 06	T07W	R37N		M	41 05	122 42	900		1960			53
F3 1990	COPCO DAM NO 1	2700	SEC 29	T48N	R04W	P	M	41 59 00	122 20 00	900		1928			47
F6 2081	COVELO	1385	SEC 12	T22N	R13W		M	39 47 00	123 15 00	900		1921			23
F6 2084	COVELO EEL RIVER RS	1514	SEC 28	T23N	R11W		M	39 50 00	123 05 00	900		1939			23
F0 2147	CRESCENT CITY 1 N	40	SEC 20	T16N	R01W		H	41 46 00	124 12 00	900		1931			08
F0 2148	CRESCENT CITY 7 ENE	120	SEC 08	T16N	R01E		H	41 48 00	124 05 00	900		1913			08
F0 2150	CRESCENT CITY HMS	50	SEC 20	T16N	R01W		H	41 46 00	124 12 00	900		1941			08
F0 2152	CRESCENT CITY 11 E	360	SEC 30	T16N	R02E	B	H	41 45 18	123 59 30	000		1947			08
F1 2188	CROWDER FLAT	5175	SEC 20	T47N	R11E	K	M	41 53 00	120 44 00	000		1958			25
F6 2218	CUMMINGS	1270	SEC 21	T23N	R16W		M	39 50 00	123 38 00	900		1927			23
F1 2480	DORRIS INSPECT STA	4240	SEC 36	T48N	R01W	R	M	41 57 18	121 54 30	000		1959			47
F6 2490	DOS RIOS	927	SEC 31	T22N	R13E		M	39 43 00	123 21 00	900		1917			23
F0 2749	ELK VALLEY	1711	SEC 34	T19N	R04E		H	42 00 00	123 43 00	900		1938			08
F2 2899	ETNA	2912	SEC 28	T42N	R09W		M	41 28 00	122 54 00	900		1940			47
F7 2906	ETTERSBURG 2 SE	1370	SEC 16	T04S	R02E	D	H	40 07 12	123 58 18	000		1953			12
F6 2910	EUREKA WB CITY	43	SEC 22	T05N	R01W		H	40 48	124 10	900		1878			12
F7 3025	FERNDALE 8 SSW	1445	SEC 06	T01N	R02W	P	H	40 29 30	124 20 24	900		1959			12
F6 3030	FERNDALE 2NW	10	SEC 34	T03N	R02W	K	H	40 35 54	124 16 36	900		1963			12
F5 3041	FIELDBROOK 4 D RCH	285	SEC 36	T07N	R01E	P	H	40 56 36	124 01 06	000		1956			12
F3 3122	FOOTHILL SCHOOL	2960	SEC 25	T46N	R05W	F	M	41 48 42	122 22 18	000		1962			
F4 3130	FOREST GLEN	2340	SEC 22	T01S	R08E		H	40 23 00	123 20 00	900		1930			53
F3 3151	FORKS OF SALMON	1270	SEC 24	T10N	R07E	A	H	41 15 12	123 19 00	900		1959			47
F0 3173	FORT DICK 1 NNE	50	SEC 11	T17N	R01W		H	41 52 00	124 09 00	900		1951			08
F2 3176	FORT JONES 6 ESE	3324	SEC 12	T43N	R08W		M	41 35 00	122 43 00	900		1941			47
F2 3182	FORT JONES RANGER ST	2720	SEC 02	T43N	R09W	C	M	41 36 00	122 51 00	900		1936			47
F6 3194	FORTUNA	60	SEC 35	T03N	R01W	Q	H	40 36 00	124 09 00	000		1956			12
F6 3217	FOX CAMP	2500	SEC 09	T02S	R01E	R	H	40 18 24	124 03 54	811		1960			12
F6 3320	GARBERVILLE	340	SEC 24	T04S	R03E		H	40 06 00	123 48 00	900		1938			12
F6 3322-01	GARBERVILLE MAINTSTN	540	SEC 24	T04S	R03E	G	H	40 06 00	123 47 40	809		1935			12
F0 3357	GASQUET RANGER STA	384	SEC 21	T17N	R02E	N	H	41 52 00	123 58 00	900		1940			08
F2 3361-03	GAZELLE - EPPERSON	2760	SEC 17	T43N	R06W	J	M	41 34 18	122 33 12			1950			47
F2 3362-03	GAZELLE 4NNW	2730	SEC 16	T43N	R06W	C	M	41 34 42	122 32 42	000		1949	1964		47
F2 3363	GAZELLE LOOKOUT	5200	SEC 08	T41N	R07W	J	M	41 24 30	122 40 30	000		1956			47
F1 3564	GRASS LAKE HWY M S	5080	SEC 28	T44N	R03W	G	M	41 37 48	122 11 30	900		1954			47
F2 3614	GREENVIEW	2818	SEC 29	T43N	R09W		M	41 33 00	122 54 00	900		1943			47
F6 3647	GRIZZLY CRK REDWOOD	500	SEC 11	T01N	R02E		H	40 29 00	123 47 00	900		1963			12
F3 3761	HAPPY CAMP RANGR STA	1090	SEC 11	T16N	R07E		H	41 48 00	123 23 00	900		1914			47
F6 3785	HARRIS 7 SSE	1910	SEC 27	T05S	R05E	N	H	39 59 24	123 36 42	000		1953			23
F6 3810	HARTSOOK INN	470	SEC 24	T05S	R03E	D	H	40 00 48	123 47 30	000		1958			12
F4 3859	HAYFORK RANGER STA	2340	SEC 12	T31N	R12W	R	M	40 33 00	123 10 00	900		1915			53
F4 3949	HIDDEN VALLEY RCH	1978	SEC 32	T01N	R07E	M	H	40 24 54	123 24 30	000		1959			53
F6 3956	HIGH ROCK	900	SEC 15	T01S	R02E	K	H	40 22 48	123 56 30	808		1960			44
F3 3987	HILTS	2900	SEC 23	T48N	R07W		M	42 00 00	122 38 00	900		1939			47
F6 4037-02	HOLMES	150	SEC 33	T01N	R02E	R	H	40 25 06	123 57 06	000		1954			12
F7 4074	HONEYDEW 2 WSW	380	SEC 02	T03S	R01W	C	H	40 14 18	124 09 00	900		1953			12
F7 4074-01	HONEYDEW HUNTER	380	SEC 02	T03S	R01W	M	H	40 14 18	124 09 06	000		1955			12
F5 4077	HONOR CAMP 42	1875	SEC 31	T07N	R03E	K	H	40 56 48	123 52 42	000		1956			12
F4 4082	HOOPA	350	SEC 25	T08N	R04E		H	41 03 00	123 40 00	900		1941			12

TABLE A-1 (Continued)

INDEX OF CLIMATOLOGICAL STATIONS FOR 1963-64

NORTH COASTAL AREA

Station Number	Station Name	Elevation (in feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude °	Latitude '	Latitude =	Longitude °	Longitude '	Longitude =	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
F4 4084	HOOPA 2 SE	315	SEC 31	T08N	R05E		H	41	02	00	123	39	00	900		1954			12
F4 4191	HYAMPOM	1260	SEC 25	T03N	R06E		H	40	37	00	123	28	00	900		1940			53
F0 4202	IDLEWILD MAINT STN	1250	SEC 06	T17N	R04E	D	H	41	54	00	123	46	12	900		1946			08
F3 4577	KLAMATH	25	SEC 15	T13N	R01E		H	41	31	00	124	02	00	900		1941			08
F3 4583	KLAMATH RIVER 1 SW	1750	SEC 12	T46N	R09W	A	M	41	51	06	122	50	06	000		1958	1963		47
F4 4587	KNEELAND 10 SSE	2356	SEC 13	T03N	R02E		H	40	38	00	123	54	00	900		1952			12
F5 4602	KORBEL	150	SEC 28	T06N	R02E	P	H	40	52	00	123	57	30	900		1937			12
F6 4690	LAKE MOUNTAIN		SEC 21	T05S	R07E		H	40	01	00	123	24	00	900		1939			53
F1 4838	LAVA BEDS NAT MON	4770	SEC 28	T45N	R04E	H	M	41	43	48	121	30	30	900		1940		06	47
F6 4851	LAYTONVILLE	1640	SEC 01	T21N	R15W		M	39	42	00	123	29	00	900		1940			23
F5 4982	LITTLE RIVER	150	SEC 31	T08N	R01E	P	H	41	01	54	124	06	36	000		1949			12
F2 4984-02	LITTLE SHASTA	2725	SEC 26	T45N	R05W	C	M	41	43	00	122	23	00	000		1960			47
F1 5081-01	LONG BELL STATION	4375	SEC 20	T42N	R05E	B	M	41	28	00	121	25	00	000		1958			25
F5 5244	MAD RIVER RANGER STA	2775	SEC 17	T01N	R06E		H	40	27	00	123	32	00	900		1943			53
F7 5295-41	MANN RANCH	2200	SEC 35	T02S	R01E	E	H	40	15	24	124	02	48	811		1960			12
F1 5505	MEDICINE LAKE	6660	SEC 10	T43N	R03E		M	41	35	00	121	37	00	900		1946			47
F6 5676	MINA 3 NW	2875	SEC 28	T05S	R07E	A	H	40	00	06	123	23	30	000		1927			53
F6 5713	MIRANDA SPENGLER RCH	400	SEC 19	T03S	R04E		H	40	12	00	123	46	00	900		1939			12
F2 5783	MONTAGUE	2500	SEC 27	T45N	R06W	Q	M	41	43	42	122	31	36	000	045783	1888		05	47
F2 5785	MONTAGUE 3 NE	2640	SEC 18	T45N	R05W		M	41	45	00	122	28	00	900		1948			47
F1 5941	MOUNT HERRON R S	4250	SEC 32	T46N	R01W		M	41	47	00	122	00	00	900		1942			47
F4 6032	MUMBO BASIN	5700	SEC 35	T39N	R06W	E	M	41	12	00	122	32	00	900		1946			53
F6 6050	MYERS FLAT	175	SEC 30	T02S	R03E	J	H	40	15	42	123	52	00	000		1950			12
F6 6050-01	MYERS FLAT - CRANE															1963			12
F3 6328	OAK KNOLL RANGER STA	1963	SEC 12	T46N	R09W		M	41	50	00	122	51	00	900		1942			47
F6 6408	OLD HARRIS	2225	SEC 30	T04S	R05E	G	H	40	05	00	123	39	42	000		1956			12
F5 6497-01	ORICK 3 NNE	50	SEC 22	T11N	R01E	K	H	41	19	24	124	02	30	000		1950			12
F5 6497-02	ORICK ARCATA REDWOOD	75	SEC 22	T11N	R01E	K	H	41	19	24	124	02	36	000		1954			12
F5 6498	ORICK PRAIRIE CREEK	161	SEC 02	T11N	R01E		H	41	20	00	124	02	00	900		1937			12
F3 6508	ORLEANS	403	SEC 31	T11N	R06E		H	41	18	00	123	32	00	900		1885			12
F5 6745	PATRICKS PT STATE PK	250	SEC 26	T09N	R01W	L	H	41	08	12	124	09	00	804		1947			12
F7 6835-01	PETROLIA	175	SEC 05	T02S	R02W	L	H	40	19	30	124	18	48	000		1958			12
F7 6835-02	PETROLIA 4 NW	900	SEC 19	T01S	R02W	D	H	40	22	24	124	18	30	000		1953			12
F6 6851-15	PHILLIPSVILLE 15E	300	SEC 19	T03S	R04E	B	M	40	11	42	123	46	00	000		1963			
F6 6976	PLASKETT	6580	SEC 27	T22N	R09W	A	M	39	44	12	122	51	24	000		1960			11
F4 7404	RICHARDSON GROVE	500					H	40	02		123	47		900					12
F4 7698	SALYER RANGER STA	623	SEC 14	T06N	R05E		H	40	53	00	123	35	00	900		1931			53
F3 8025	SAWYERS BAR R S	2169	SEC 20	T40N	R11W		M	41	18	00	123	08	00	900		1931			47
F6 8045	SCOTIA	139	SEC 07	T01N	R01E		H	40	29	00	124	06	00	900		1926			12
F3 8083-01	SEIAD VALLEY R S	1371	SEC 11	T46N	R12W	R	M	41	50	36	123	11	42	905		1953			47
F7 8162	SHELTER COVE	55	SEC 16	T05S	R01E		H	40	02	00	124	04	00	900					12
F6 8163	SHERWOOD VALLEY	2170	SEC 32	T20N	R14W	F	M	39	32	36	123	26	30	901		1958			23
F0 8311-01	SMITH RIVER 2 WNW	195	SEC 21	T16N	R01W	A	H	41	56	30	124	10	42	000		1951			08
F0 8311-02	SMITH RIVER 7 SSE	60	SEC 30	T17N	R01E	F	H	41	50	24	124	06	36	000		1952			08
F3 8346	SOMESBAR 1W	520	SEC 04	T11N	R06E		H	41	23	00	123	29	00	900		1954			12
F6 8490	STANDISH HICKEY PARK	850	SEC 03	T23N	R17W	F	M	39	52	30	123	43	30	900		1950			23
F3 8919	TI BAR R S	710	SEC 08	T13N	R06E	L	H	41	31	48	123	31	30	905		1959			47
F4 9024	TRINITY DAM VISTA PT	2500	SEC 16	T34N	R08W		M	40	48	00	122	46	00	900		1959			53
F1 9053	TULELAKE	4035	SEC 06	T47N	R05E		M	41	58	00	121	28	00	900		1932			47
F1 9057	TULELAKE INSP STN	4408	SEC 31	T44N	R07E	F	M	41	36		121	12		000	049057	1953			25
F7 9177	UPPER MATTOLE	255	SEC 33	T02S	R01W		H	40	15	00	124	11	00	900		1886			12
F4 9490	WEAVERVILLE RANGER S	2050	SEC 12	T33N	R10W		M	40	44	00	122	56	00	900		1871			53
F2 9499	WEED 1 S	3630	SEC 11	T41N	R05W		M	41	25	00	122	23	00	900		1957			47
F6 9527	WEOTT 2SE	600	SEC 12	T02S	R02E	H	H	40	18	29	123	53	40	000		1961			12
F7 9654	WHITETHORN	1050	SEC 15	T05S	R02E	E	M	40	01	18	123	56	12	000		1962			12
F6 9684	WILLITS 1 NE	1350	SEC 17	T18N	R13W		M	39	25	00	123	21		900		1950			23
F6 9685	WILLITS HOWARD RS	1925	SEC 05	T17N	R13W		M	39	21	00	123	19	00	900		1935			23
F6 9686	WILLITS NW PAC RR	1365	SEC 18	T18N	R13W	L	M	39	24	12	123	21	06	006		1911			23
F6 9753	WITTS RANCH															1963			12
F2 9866	YREKA	2631	SEC 27	T45N	R07W		M	41	43	00	122	38	00	900		1871			47
F6 9940	ZENIA 1 SSE	2680	SEC 22	T03S	R06E	G	H	40	11	18	123	28	54	000		1950			53

TABLE A-2

PRECIPITATION DATA FOR 1963-64

NORTH COASTAL AREA

Station	Precipitation in inches												
	Season	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
SMITH RIVER													
CRESCENT CITY 1 N	57.39	0.49	0.02	1.04	7.36	14.32	4.39	16.15	2.08	6.79	1.14	1.71	1.90
CRESCENT CITY 7 ENE	74.62	0.46	0.00	1.47	8.00	18.70	5.56	22.09	3.95	8.08	1.25	3.06	2.00
CRESCENT CITY HMS	56.47	0.49	0.00	1.21	7.17	14.00	4.27	16.41	1.78	6.73	1.36	1.22	1.83
CRESCENT CITY 11 E	91.14	0.35	0.00	1.77	7.92	26.71	5.49	31.24	2.54	10.14	1.00	2.38	1.60
ELK VALLEY	67.64	0.10	0.00	0.62	6.49	18.64	6.19	23.17	1.48	7.14	1.32	1.46	1.03
FORT DICK 1 NNE	71.10	0.00	0.00	1.74	9.28	16.35	7.02	20.37	0.89	*	11.32	4.13	-
GASQUET RANGER STA	81.37	0.30	0.00	1.54	7.70	20.56	6.49	24.98	3.66	10.75	1.13	2.80	1.46
IDLEWILD MAINT STN	66.45	0.26	0.00	0.69	6.45	18.37	4.29	21.00	1.76	9.26	1.09	2.06	1.22
SMITH RIVER 2 WNW	77.30	1.50	0.00	0.65	10.10	20.95	6.95	16.30	3.20	10.75	1.30	2.30	3.30
SMITH RIVER 7 SSE	77.37	1.30	T	3.05	8.90	17.99	5.35	20.70	3.50	10.50	1.11	2.78	2.19
LOST RIVER													
DORRIS INSPECT STA	12.70	0.13	1.36	0.06	0.98	0.98	0.75	3.09	0.08	0.98	0.60	1.05	2.64
GRASS LAKE HWY M 5	20.50	T	0.02	0.22	2.13	1.97	1.68	5.39	0.79	1.95	1.40	1.97	2.98
LAVA BEDS NAT MON	13.47	0.00	0.08	0.39	1.54	1.68	0.76	3.00	0.29	1.11	0.30	1.18	3.14
MOUNT HEBRON R 5	09.44	0.31	0.25	0.08	0.37	1.66	0.85	1.65	0.01	0.46	0.43	1.09	2.28
TULELAKE	07.18	0.00	0.20	0.23	1.00	1.35	0.69	1.48	0.11	0.83	0.46	0.64	0.19
TULELAKE INSP STN	12.77	0.16	0.30	1.00	1.66	1.73	0.40	2.77	0.17	1.15	0.23	1.10	2.10
SHASTA-SCOTT													
BIG SPRINGS 4 E	09.85	0.00	0.00	0.30	1.17	0.75	0.90	1.67	0.42	0.61	0.55	1.13	2.35
CALLAHAN RANGER STA	16.07	T	0.01	0.14	2.16	4.25	1.21	4.95	0.23	0.72	0.06	0.90	1.44
ETNA	21.05	0.10	0.12	0.15	1.36	6.35	1.40	8.55	0.22	1.58	0.10	0.43	0.69
FORT JONES 6 ESE	16.15	0.06	0.44	0.13	1.68	3.60	1.21	5.51	0.29	1.52	0.10	0.63	0.98
FORT JONES RANGER ST	16.56	0.11	0.08	0.07	1.37	4.60	1.28	6.21	0.38	1.46	0.11	0.27	0.62
GAZELLE - EPPERSON	12.44	0.00	1.48	0.12	1.19	1.86	1.04	3.57	0.00	1.14	0.36	0.30	1.38
GAZELLE 4MNW	09.42	0.02	0.68	0.11	1.00	1.48	0.93	2.77	0.08	0.62	0.08	0.46	1.19
GREENVIEW	17.97	0.18	0.00	0.10	1.41	5.47	1.38	7.02	0.80	0.65	0.00	0.31	0.65
LITTLE SHASTA	12.77	0.50	0.00	0.33	1.27	1.85	1.23	3.55	0.00	1.35	0.06	0.59	2.04
MONTAGUE	11.11	0.02	0.02	0.23	1.13	1.94	0.95	3.92	0.00	1.04	0.11	0.46	1.29
MONTAGUE 3 NE	-	0.00	0.00	0.46	1.22	2.06	0.85	-	-	-	0.03	0.59	1.60
WEED 1 S	21.18	0.40	0.10	0.64	2.76	5.62	1.02	4.13	0.36	1.71	0.50	1.93	2.01
YREKA	14.66	0.13	0.50	0.15	1.31	3.25	1.13	5.23	0.42	0.93	0.15	0.50	0.96
KLAMATH RIVER													
CECILVILLE SAWYER	33.05	0.11	0.08	0.00	12.28	10.04	2.23	5.19	-	-	0.33	1.28	1.51
CLEAR CREEK	52.89	0.00	0.00	T	6.05	16.08	3.86	18.75	1.40	5.01	0.10	0.96	0.68
COPCO DAM NO 1	17.68	0.01	0.08	0.22	1.65	3.76	1.03	5.42	0.41	1.90	0.69	0.71	1.80
FOOTHILL SCHOOL	17.65	0.10	0.40	0.05	1.29	3.23	1.22	4.99	0.18	1.10	0.37	0.97	3.75
FORKS OF SALMON	36.40	0.00	T	T	4.48	10.53	2.44	13.01	0.26	3.65	0.39	0.90	0.74
HAPPY CAMP RANGR STA	47.24	0.00	T	0.15	5.66	14.32	3.46	15.13	1.59	4.47	0.24	0.62	0.60
HILTS	15.94	0.13	0.02	0.40	2.03	5.05	0.91	4.58	0.34	1.40	0.45	0.47	0.16
KLAMATH	74.20	0.33	T	1.76	8.09	19.79	5.83	22.50	2.24	8.96	1.43	1.68	1.59
KLAMATH RIVER 1 SW	-	0.10	0.02	0.19	1.21	5.72	-	-	-	-	-	-	-
OAK KNOLL RANGER STA	22.52	0.15	0.08	0.33	1.90	6.37	1.80	6.82	0.73	2.34	0.41	0.64	0.95
ORLEANS	47.77	0.15	0.00	0.13	5.69	13.77	4.22	15.12	0.61	5.39	0.77	1.24	0.68
SAWYERS BAR R S	38.20	0.00	T	0.07	4.84	11.33	2.89	12.54	1.32	3.11	0.29	0.74	1.07
SEIAD VALLEY R S	38.99	T	0.02	0.12	3.75	12.09	2.73	13.32	1.22	3.88	0.55	0.70	0.61
SOMESBAR 1W	34.41	0.38	T	0.11	5.86	15.02	4.27	-	2.08	5.73	0.27	-	0.69
TI BAR R S	54.30	0.03	0.00	0.21	6.28	15.89	4.73	16.83	1.94	5.93	0.36	1.22	0.88
TRINITY RIVER													
BIG BAR RANGER STA	27.32	0.00	0.20	0.17	4.72	9.55	2.51	5.84	0.45	2.30	0.37	0.83	0.38
BURNT RANCH 1S	41.22	0.00	0.12	0.06	5.47	10.66	3.32	12.46	1.36	4.47	0.86	1.55	0.87
BURNT RCH HMS	-	-	-	-	-	9.26	2.38	11.91	1.28	3.90	0.89	3.46	0.59
COFFEE CREEK RS	39.85	0.00	0.37	1.50	7.11	13.38	1.46	9.53	0.22	3.02	0.06	1.13	2.07
FOREST GLEN	33.06	T	0.03	0.13	5.66	16.33	2.84	-	0.68	4.36	-	2.56	0.47
HAYFORK RANGER STA	26.68	0.00	0.14	0.16	4.12	9.67	1.63	6.60	0.71	1.86	0.29	1.10	0.40
HIDDEN VALLEY RCH	41.80	T	0.02	0.00	5.25	11.30	3.13	12.84	1.08	4.93	0.36	2.34	0.55
HOOPA	49.94	0.01	0.02	0.15	5.63	13.73	3.97	15.01	2.11	5.92	0.51	1.44	1.44
HOOPA 2 SE	52.86	0.04	0.01	0.34	6.25	13.65	4.28	16.37	1.93	6.46	0.57	1.84	1.12
HYAMPOM	-	0.00	0.05	0.00	3.44	10.76	2.86	11.71	0.39	3.17	0.20	0.86	-
SALYER RANGER STA	42.89	0.00	0.12	0.13	5.20	10.34	3.86	13.57	1.59	5.03	0.73	1.72	0.60
TRINITY DAM VISTA PT	25.31	0.00	0.03	0.14	2.55	9.50	2.26	6.81	0.38	1.71	0.18	0.76	0.99
WEAVERVILLE RANGER S	28.04	0.04	T	0.14	3.24	9.82	2.57	7.52	0.88	1.97	0.31	0.78	0.77

TABLE A-2 (Continued)

PRECIPITATION DATA FOR 1963-64

NORTH COASTAL AREA

Station	Precipitation in inches												
	Season	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
AD RIVER													
ARCATA A P	44.27	0.30	0.07	0.62	6.16	9.02	3.41	13.21	2.29	5.80	0.62	1.44	1.33
BIG LAGOON	57.25	0.18	0.96	0.00	7.43	13.51	3.47	16.73	2.65	6.42	1.49	2.30	2.11
BLUE LAKE	52.03	0.00	0.04	0.57	6.00	10.93	4.37	15.71	2.78	6.39	1.14	2.36	1.74
BLUE LAKE REDWOOD CR	57.90	0.11	0.00	0.42	6.44	17.69	1.94	14.68	3.39	7.08	1.60	3.05	1.61
FIELDBROOK 4 D RCH	70.74	0.02	0.01	1.20	9.65	15.15	*	28.72	3.06	8.01	1.42	1.60	1.90
HONOR CAMP 42	78.33	0.26	0.12	0.80	9.24	20.19	5.68	24.26	2.85	8.24	2.05	2.07	2.57
KORBEL	48.31	0.07	0.03	0.78	5.58	9.07	3.75	15.71	2.08	6.00	1.15	2.13	1.96
LITTLE RIVER	63.42	0.26	T	1.01	8.00	12.48	4.93	19.20	3.72	7.96	1.88	1.94	2.04
MAD RIVER RANGER STA	49.98	0.00	0.05	0.03	5.97	13.89	4.27	16.82	0.43	4.75	0.87	2.17	0.73
ORICK 3 NNE	70.21	0.51	T	1.00	7.11	17.75	4.52	21.93	1.96	9.49	0.75	2.99	2.20
ORICK ARCATA REDWOOD	63.51	0.38	0.03	0.96	6.74	15.68	4.12	19.53	2.59	7.97	0.62	2.83	2.06
ORICK PRAIRIE CREEK	68.04	0.33	0.10	0.92	6.66	17.30	5.24	21.28	2.30	7.65	1.36	2.51	2.39
PATRICKS PT STATE PK	68.31	0.36	0.00	0.90	7.75	13.75	4.38	24.62	2.78	8.20	1.57	2.24	1.76
EL RIVER													
AOANAC LODGE	53.29	0.03	T	0.13	5.79	18.27	3.65	15.22	1.09	6.68	0.44	1.56	0.43
ALDERPOINT	40.30	T	T	0.27	4.31	12.84	3.61	10.93	0.74	4.20	0.85	1.88	0.67
BRANSCOMB 2 NW	64.38	0.02	0.05	0.33	7.05	22.21	4.88	17.64	0.89	6.82	1.15	2.54	0.80
BRIDGEVILLE 4 NNW	61.61	0.00	0.04	0.52	8.26	15.16	5.50	17.36	2.88	6.73	1.17	2.95	1.04
BRIDGEVILLE P O	50.06	0.02	0.00	0.23	7.56	11.98	2.46	16.46	1.67	6.28	0.73	2.06	0.61
BULL CREEK	54.98	0.08	0.00	0.33	9.72	15.18	3.65	14.20	1.64	7.63	1.31	0.64	0.60
BURLINGTON ST PARK	51.29	0.00	0.00	0.23	9.19	15.27	3.22	13.48	1.56	5.83	0.67	1.51	0.33
CEDAR CREEK HATCHERY	52.42	0.01	0.00	0.09	5.56	18.39	3.43	15.07	1.15	5.57	1.08	1.69	0.38
COVELO	29.27	0.00	0.00	0.03	3.35	9.95	2.11	9.30	0.49	3.24	0.39	-	0.41
COVELO EEL RIVER RS	-	0.00	0.00	0.06	3.59	9.42	1.69	-	0.47	3.25	0.32	1.02	0.23
CUMMINGS	55.30	0.08	0.10	0.49	5.59	17.60	3.56	16.07	1.03	8.02	0.66	1.59	0.51
DOS RIOS	32.36	0.00	0.00	0.00	3.88	12.77	1.82	8.16	0.19	3.93	0.45	0.89	0.27
EUREKA WB CITY	37.60	0.11	0.07	0.68	5.41	6.91	3.20	11.13	1.20	5.91	0.67	1.59	0.72
FERNDALE 2NW	35.22	0.27	0.14	0.51	4.20	7.12	3.44	10.72	1.18	5.25	0.43	1.42	0.54
FORTUNA	40.13	0.12	0.07	0.53	5.67	7.91	2.97	11.26	2.37	6.06	0.89	1.52	0.76
FOX CAMP	59.13	0.00	0.00	0.00	11.80	17.59	3.71	14.09	1.08	6.49	1.36	2.19	0.82
GARBERVILLE	45.46	0.00	0.00	0.30	7.08	13.46	2.95	13.84	0.65	4.65	0.50	1.20	0.83
GARBERVILLE MAINTSTN	31.13	0.00	T	0.32	6.25	0.32	2.11	12.68	0.89	5.52	0.56	1.17	1.31
GRIZZLY CRK REDWOOD	-	-	-	-	-	-	-	-	-	-	-	-	-
HARRIS 7 SSE	44.88	T	0.01	0.08	5.14	15.49	2.77	13.35	0.79	4.62	0.47	1.72	0.44
HARTSOOK INN	51.72	0.00	0.00	0.35	7.54	17.08	3.37	14.58	0.76	5.03	0.78	1.81	0.42
HIGH ROCK	48.61	0.01	0.02	0.30	8.87	12.81	2.86	12.62	1.66	6.53	0.83	1.66	0.42
HOLMES	44.07	T	0.08	0.22	7.92	11.03	2.68	10.55	1.94	6.99	0.67	1.57	0.42
KNEELAND 10 SSE	-	0.00	0.03	0.31	6.91	13.47	5.69	-	1.27	8.40	1.76	2.67	1.48
LAKE MOUNTAIN	44.24	0.00	0.00	0.36	4.80	14.03	2.68	13.42	0.59	5.17	0.55	1.79	0.85
LAYTONVILLE	41.51	0.00	0.00	0.81	4.49	15.39	2.66	11.33	0.63	4.62	0.40	0.87	0.31
MINA 3 NW	45.34	0.00	0.00	0.50	5.85	14.50	3.56	10.26	1.22	4.71	0.90	2.72	1.12
MIRANDA SPENGLER RCH	35.41	0.00	0.00	0.20	5.65	11.81	2.84	9.40	0.59	3.91	0.04	0.77	0.20
MYERS FLAT	54.08	0.00	0.00	0.24	9.56	15.35	3.57	15.13	2.05	5.89	0.55	1.27	0.47
MYERS FLAT - CRANE	-	-	-	-	-	-	-	13.81	1.24	5.38	0.46	1.47	0.38
OLD HARRIS	51.49	0.02	T	0.22	7.24	17.06	3.51	13.82	0.88	5.93	0.67	1.18	0.96
PHILLIPSVILLE 1SE	42.74	0.01	T	0.30	6.62	13.42	3.41	10.37	0.86	5.95	0.57	0.70	0.53
RICHARDSON GROVE	52.71	0.01	T	0.11	6.81	17.42	3.18	16.28	0.64	5.32	0.56	2.00	0.38
SCOTIA	38.23	0.08	0.02	0.36	5.66	8.70	2.65	9.59	1.68	6.11	0.86	1.65	0.87
SHERWOOD VALLEY	57.89	0.04	0.00	0.07	6.20	18.66	5.00	16.30	1.10	6.09	0.97	2.52	0.94
STANDISH HICKEY PARK	50.94	0.06	0.02	0.11	6.09	19.11	3.98	16.35	1.03	0.65	1.02	2.00	0.52
WEOTT 2SE	47.14	0.00	0.00	0.19	8.35	13.11	3.04	12.85	1.50	5.76	0.62	1.37	0.35
WILLITS 1 NE	38.45	0.00	0.02	0.01	4.59	12.82	2.75	10.36	0.69	4.88	0.40	1.67	0.26
WILLITS HOWARD RS	36.11	0.00	0.03	0.12	4.83	11.71	2.44	10.35	4.13	0.44	0.39	1.34	0.33
WILLITS NW PAC RR	38.30	0.00	0.00	0.00	4.86	12.69	2.69	10.77	0.46	4.95	0.07	1.56	0.25
WITTS RANCH	-	-	0.00	0.31	8.67	13.32	3.39	13.63	2.60	5.52	0.63	1.58	0.44
ZENIA 1 SSE	50.84	0.00	0.00	0.23	6.87	17.52	3.17	13.47	0.70	4.77	1.12	1.97	1.02
MATTOLE RIVER													
CAPE RANCH	48.06	0.08	0.00	1.20	7.73	11.09	4.29	12.05	1.50	7.25	0.16	1.72	0.99
ETTERSBURG 2 SE	59.49	0.00	0.00	0.33	10.33	16.74	4.09	20.85	0.00	5.32	0.00	0.83	1.00
FERNDALE 8 SSW	48.60	0.14	0.00	1.72	6.61	10.35	3.84	11.47	2.07	7.40	1.45	2.09	1.46
HONEYDEW 2 WSW	73.16	0.02	0.05	0.65	14.09	22.03	4.27	19.81	1.25	8.04	0.47	2.32	0.16
HONEYDEW HUNTER	74.63	0.01	0.05	0.80	14.15	22.03	5.32	19.77	1.48	9.15	0.16	1.52	0.19
MANN RANCH	71.03	0.10	0.03	0.65	15.69	19.70	3.98	17.85	3.05	5.72	0.51	2.84	0.91
PETROLIA	48.28	0.04	0.04	0.96	8.82	12.05	3.62	13.47	1.36	5.92	0.26	1.44	0.30
PETROLIA 4 NW	54.00	0.00	0.00	1.20	8.00	13.30	3.35	15.00	2.55	6.45	1.15	2.25	0.75
SHELTER COVE	51.21	0.03	0.04	0.80	8.69	12.56	4.72	13.63	0.64	6.53	0.45	1.33	1.79
UPPER MATTOLE	58.18	T	0.00	0.55	11.94	16.12	3.61	15.79	1.32	6.30	0.32	1.98	0.25
WHITETHORN	68.23	0.12	T	0.27	12.33	19.70	4.97	20.31	1.26	6.74	0.16	1.75	0.62

TABLE A-3

TEMPERATURE DATA FOR 1963-64

NORTH COASTAL AREA

Station		Temperature in Degrees Fahrenheit												
Number	Name	Season	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
F5-0901	BLUE LAKE	MAXIMUM	82	82	70	82	74	63	75	62	77	68	66	71	80
		AVG.MAX.	62.4	68.4	67.6	70.2	65.1	59.2	56.7	52.0	61.0	56.5	61.1	63.6	67.
		AVERAGE	54.0	61.9	60.2	61.5	57.4	52.1	48.2	45.6	47.8	48.3	50.8	54.9	59.
		AVG.MIN.	45.6	55.4	52.9	52.8	49.8	45.0	39.8	39.2	34.6	40.1	40.6	46.2	50.
		MINIMUM	28	48	46	44	34	32	29	29	28	28	28	32	43
F4-1215-15	BURNT RCH HMS	MAXIMUM	-	-	-	-	-	58	65	67	72	79	82	83	93
		AVG.MAX.	-	-	-	-	-	52.0	52.1	46.6	60.8	57.1	67.7	69.1	75.
		AVERAGE	-	-	-	-	-	46.5	43.6	40.8	45.8	46.2	52.2	55.1	81.
		AVG.MIN.	-	-	-	-	-	41.0	35.1	34.9	30.8	35.2	36.8	41.1	47.
		MINIMUM	-	-	-	-	-	31	30	30	25	28	32	33	41
F6-1608	CEDAR CREEK HATCHERY	MAXIMUM	103	102	98	100	92	68	59	55	74	80	87	83	103
		AVG.MAX.	67.4	83.5	85.6	84.4	67.3	55.8	51.8	47.9	61.3	58.9	66.7	68.5	76.
		AVERAGE	54.6	65.9	67.6	67.6	57.4	48.8	44.2	41.5	46.2	46.8	51.5	55.2	82.
		AVG.MIN.	41.8	48.3	49.5	50.7	47.4	41.8	36.6	35.1	31.2	34.8	36.3	42.0	47.
		MINIMUM	25	40	41	43	35	31	28	28	25	28	31	31	40
F3-1990	COPCO DAM NO 1	MAXIMUM	-	100	-	100	93	65	58	51	65	76	84	87	98
		AVG.MAX.	-	87.8	-	88.2	69.3	51.5	47.3	43.0	55.0	55.7	66.9	72.8	79.
		AVERAGE	-	70.8	-	71.4	56.4	44.0	38.3	35.6	41.2	43.0	50.9	57.2	64.
		AVG.MIN.	-	53.8	-	54.7	43.6	36.6	29.3	28.3	27.4	30.3	34.9	41.6	49.
		MINIMUM	20	43	-	47	30	26	20	21	21	22	28	26	40
F1-2480	DORRIS INSPECT STA	MAXIMUM	90	89	90	88	84	62	52	54	50	66	74	79	88
		AVG.MAX.	59.0	78.6	79.8	77.3	62.4	48.6	44.4	39.0	41.6	47.4	55.4	62.8	70.
		AVERAGE	44.5	60.0	61.4	59.8	48.1	38.1	32.2	28.0	28.6	34.6	39.4	47.6	55.
		AVG.MIN.	30.0	41.5	43.0	42.4	33.8	27.6	20.1	17.0	15.7	21.9	23.4	32.4	40.
		MINIMUM	2	26	32	30	16	16	2	2	8	10	17	18	29
F5-3041	FIELDBROOK 4 D RCH	MAXIMUM	87	81	75	87	76	65	61	59	-	-	68	69	79
		AVG.MAX.	-	71.9	71.9	73.6	68.8	60.1	56.0	51.4	-	-	61.3	62.2	69.
		AVERAGE	-	60.8	61.2	62.1	57.8	50.6	45.4	43.9	-	-	49.1	52.4	59.
		AVG.MIN.	-	49.7	50.6	50.6	46.8	41.2	34.7	36.4	-	-	36.9	42.5	49.
		MINIMUM	28	44	45	47	33	30	28	29	-	-	30	33	45
F6-3322-01	GARBERVILLE MAINTSTN	MAXIMUM	102	102	98	90	85	90	60	69	72	80	78	85	100
		AVG.MAX.	71.1	89.5	92.6	83.4	70.6	83.4	50.2	51.5	60.8	59.7	63.8	67.9	80.
		AVERAGE	56.8	68.4	71.0	66.6	58.1	66.6	43.6	43.6	45.8	48.0	51.2	54.8	63.
		AVG.MIN.	42.4	47.4	49.5	49.8	45.6	49.8	37.1	35.7	30.8	36.2	38.5	41.7	47.
		MINIMUM	26	40	44	39	38	39	33	30	26	28	33	36	42
F2-3363	GAZELLE LOOKOUT	MAXIMUM	-	88	89	90	-	-	-	-	-	-	-	-	-
		AVG.MAX.	-	79.2	81.0	78.0	-	-	-	-	-	-	-	-	-
		AVERAGE	-	64.2	66.7	65.9	-	-	-	-	-	-	-	-	-
		AVG.MIN.	-	49.2	52.4	53.8	-	-	-	-	-	-	-	-	-
		MINIMUM	-	40	42	38	-	-	-	-	-	-	-	-	-
F1-3564	GRASS LAKE HWY M S	MAXIMUM	88	84	88	85	73	58	55	49	59	60	71	69	82
		AVG.MAX.	56.9	74.0	77.7	74.3	59.2	47.1	45.9	40.4	47.2	44.7	52.2	55.1	65.
		AVERAGE	42.3	57.0	59.5	56.8	45.6	37.2	33.2	28.2	29.7	31.6	38.6	40.8	49.
		AVG.MIN.	27.7	39.9	41.3	39.2	32.1	27.3	20.5	15.9	12.2	18.4	24.9	26.6	34.
		MINIMUM	-2	34	32	32	20	20	5	-2	5	8	20	15	29
F4-3949	HIDDEN VALLEY RCH	MAXIMUM	-	-	96	98	90	60	55	50	64	76	83	86	98
		AVG.MAX.	-	-	87.3	84.7	64.0	51.3	47.5	44.5	55.0	57.7	68.3	72.5	78.
		AVERAGE	-	-	69.4	68.0	56.0	46.3	41.0	38.6	42.4	45.7	51.8	57.4	63.
		AVG.MIN.	-	-	51.4	51.4	47.9	41.3	34.5	32.7	29.7	33.7	35.2	42.2	48.
		MINIMUM	25	-	44	44	32	30	25	26	25	27	30	32	42
F6-4037-02	HOLMES	MAXIMUM	98	86	86	98	87	67	67	60	75	80	71	80	86
		AVG.MAX.	65.3	75.8	73.9	78.0	69.2	57.0	54.4	52.2	60.6	59.9	63.3	67.8	71.
		AVERAGE	55.2	64.2	63.5	65.3	60.2	51.1	47.6	44.8	47.9	48.7	51.8	56.2	60.
		AVG.MIN.	45.1	52.6	53.1	52.6	51.3	45.2	40.8	37.5	35.2	37.5	40.4	45.4	49.
		MINIMUM	27	43	46	46	40	36	34	33	27	29	32	37	44
F5-4077	HONOR CAMP 42	MAXIMUM	89	84	80	89	87	69	72	59	70	71	70	70	89
		AVG.MAX.	60.1	69.4	71.7	73.5	61.6	53.6	57.3	47.9	58.4	51.4	55.7	57.5	63.
		AVERAGE	49.6	57.0	58.6	61.0	53.1	46.4	47.8	40.3	45.6	41.3	44.0	46.9	52.
		AVG.MIN.	39.0	44.5	45.4	48.6	44.6	39.3	38.2	32.8	32.9	31.2	32.2	36.3	42.
		MINIMUM	26	37	38	42	35	30	30	29	26	26	27	28	36
F0-4202	IDLEWILD MAINT STN	MAXIMUM	96	92	88	94	82	56	64	60	62	74	82	86	96
		AVG.MAX.	64.8	80.1	80.0	80.6	65.9	50.7	47.8	45.4	53.5	53.7	67.2	74.1	78.
		AVERAGE	51.5	61.7	61.8	63.1	54.8	43.0	39.0	38.5	40.4	42.2	51.7	58.2	63.
		AVG.MIN.	38.2	43.3	43.7	45.6	43.6	35.3	30.2	31.6	27.3	30.8	36.2	42.2	48.
		MINIMUM	20	36	40	40	42	26	22	28	20	24	32	32	42
F3-4583	KLAMATH RIVER 1 SW	MAXIMUM	97	94	97	96	89	66	-	-	-	-	-	-	-
		AVG.MAX.	-	84.5	86.9	85.5	67.8	55.3	-	-	-	-	-	-	-
		AVERAGE	-	68.2	70.3	68.4	57.0	47.6	-	-	-	-	-	-	-
		AVG.MIN.	-	52.0	53.7	51.3	46.1	39.8	-	-	-	-	-	-	-
		MINIMUM	-	43	46	44	31	30	-	-	-	-	-	-	-
F5-4602	KORBEL	MAXIMUM	-	-	-	82	77	66	66	63	75	75	70	75	86
		AVG.MAX.	-	-	-	75.7	67.4	58.9	55.4	52.4	60.9	58.6	62.8	64.4	71.
		AVERAGE	-	-	-	64.0	58.4	50.5	47.4	45.0	48.0	48.0	50.5	55.0	60.
		AVG.MIN.	-	-	-	52.3	49.3	42.1	39.4	37.5	35.2	37.3	38.2	45.6	50.
		MINIMUM	30	-	-	47	37	32	31	30	30	30	32	33	40

TABLE A-3 (Continued)

TEMPERATURE DATA FOR 1963-64

NORTH COASTAL AREA

Station Number	Station Name		Temperature in Degrees Fahrenheit												
			Season	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
2-5783	MONTAGUE	MAXIMUM	100	98	100	97	91	65	57	54	60	73	83	85	97
		AVG.MAX.	65.6	86.5	89.0	85.3	66.2	51.6	46.1	42.1	51.6	54.9	64.3	71.5	78.3
		AVERAGE	50.1	67.6	69.0	66.0	52.4	41.4	35.0	33.0	35.8	40.5	46.2	53.2	61.4
		AVG.MIN.	34.6	48.7	48.9	46.6	38.5	31.0	23.8	23.9	20.1	26.1	28.1	34.8	44.5
		MINIMUM	11	38	41	36	21	19	11	15	12	16	19	20	36
6-6408	OLD HARRIS	MAXIMUM	100	100	99	99	84	68	70	60	79	76	84	82	100
		AVG.MAX.	67.6	82.1	85.4	80.8	64.6	54.8	58.3	51.2	63.6	57.3	67.8	69.0	76.6
		AVERAGE	54.6	65.2	67.4	66.6	54.8	46.9	48.9	42.2	49.6	45.8	52.6	52.2	62.9
		AVG.MIN.	41.6	48.2	49.5	52.5	45.1	39.0	39.5	33.2	35.7	34.4	37.3	35.4	49.2
		MINIMUM	25	40	40	40	38	30	28	27	28	25	29	30	38
5-6498	ORICK PRAIRIE CREEK	MAXIMUM	86	83	75	85	74	64	63	56	72	65	62	70	86
		AVG.MAX.	60.4	69.4	68.5	72.9	65.5	56.2	50.4	50.5	58.2	54.2	56.1	59.3	63.9
		AVERAGE	51.3	58.2	58.6	61.2	56.2	49.8	44.3	43.6	46.0	45.0	46.2	51.2	55.0
		AVG.MIN.	42.1	46.9	48.7	49.4	46.8	43.3	38.2	36.6	33.8	35.9	36.3	43.0	46.2
		MINIMUM	24	39	40	43	37	36	24	31	27	29	30	31	38
3-8083-01	SEIAD VALLEY R S	MAXIMUM	105	103	105	101	94	64	57	52	69	73	84	89	100
		AVG.MAX.	67.4	87.2	90.4	88.0	68.1	51.1	48.0	43.6	56.8	55.9	67.4	72.1	80.5
		AVERAGE	53.3	68.0	69.9	67.4	56.2	44.7	39.7	37.8	41.7	44.0	50.0	56.2	63.8
		AVG.MIN.	39.1	48.8	49.4	46.8	44.3	38.3	31.4	32.0	26.6	32.0	32.5	40.4	47.2
		MINIMUM	22	40	41	41	32	28	22	29	20	26	25	33	39
0-8311-02	SMITH RIVER 7 SSE	MAXIMUM	86	82	74	72	74	68	64	58	74	66	62	-	86
		AVG.MAX.	-	70.0	69.0	68.0	65.8	58.5	56.0	51.9	60.0	54.0	56.1	-	65.1
		AVERAGE	-	61.0	61.5	60.6	57.6	51.1	46.0	44.4	47.4	44.6	48.1	-	57.2
		AVG.MIN.	-	52.1	54.0	53.1	49.3	43.7	37.1	37.0	34.7	35.1	38.1	-	49.2
		MINIMUM	30	46	48	48	38	36	32	32	30	32	34	-	46
6-8490	STANDISH HICKEY PARK	MAXIMUM	90	90	90	90	80	60	58	-	70	70	80	74	90
		AVG.MAX.	-	75.9	79.3	76.0	64.5	54.9	51.7	-	58.0	54.2	61.0	62.2	70.2
		AVERAGE	-	63.4	65.8	63.6	56.0	47.9	44.1	-	45.5	44.6	51.0	52.6	59.4
		AVG.MIN.	-	50.9	52.2	51.1	47.4	40.9	36.5	-	33.0	34.9	39.2	42.9	48.7
		MINIMUM	29	44	44	46	38	32	30	-	29	30	34	36	42
1-9057	TULELAKE INSP STN	MAXIMUM	93	89	93	91	85	63	64	56	49	69	73	79	88
		AVG.MAX.	59.0	78.8	82.3	78.3	64.4	47.6	46.4	37.4	40.7	44.5	56.4	62.5	69.1
		AVERAGE	44.2	60.8	62.4	60.8	49.6	37.6	34.4	27.1	26.2	30.8	40.4	46.2	54.6
		AVG.MIN.	25.9	42.7	42.5	43.3	34.9	27.7	22.5	16.8	11.6	17.2	24.4	30.0	40.2
		MINIMUM	2	35	34	31	21	15	2	5	6	9	11	17	31

TABLE A-4

EVAPORATION DATA FOR 1963-64

NORTH COASTAL AREA

MONTHLY EVAPORATION

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
F6-3030	Ferndale 2 NW	Evap.	5.31	3.81	3.65	1.93	1.45	0.78	0.70	1.80	2.32	3.42	3.91	4.1
		Wind Movement	1066	932	1022	1240	1664	1271	1736	1137	1191	1143	1193	95
		Water Temp. Avg. Max.	83.3	78.5	79.4	68.9	59.9	55.1	53.1	60.6	64.9	70.8	74.4	78.
		Water Temp. Avg. Min.	58.5	58.0	57.3	52.3	46.6	42.4	41.0	41.2	43.8	47.2	50.9	55.
F3-4581-36	Klamath Falls (Airport)	Evap.	9.86	8.43	6.80	-	-	-	-	-	-	-	7.44	6.8
		Wind Movement												
		Water Temp. Avg. Max.												
		Water Temp. Avg. Min.												
F6-4697	Lake Pillsbury No. 2	Evap.	-	-	-	-	-	-	-	-	3.33	5.03	6.31	7.6
		Wind Movement	-	-	-	-	-	-	-	-	737	998	969	89
		Water Temp Avg. Max.	-	-	-	-	-	-	-	-	58.9	72.3	78.4	82.
		Water Temp Avg. Min.	-	-	-	-	-	-	-	-	39.2	44.6	49.6	55.
F4-4921	Lewiston	Evap.	8.71	8.68	6.33	2.53	0.58	0.03	-	-	-	3.66	6.28	4.3
		Wind Movement												
		Water Temp Avg. Max.												
		Water Temp Avg. Min.												
F4-9024	Trinity Dam Vista Point	Evap.	9.71	8.91	5.99	2.16	0.48	-	-	-	-	-	6.14	7.1
		Wind Movement	-	1262	1410	1197	990	856	-	-	-	1481	1451	131
		Water Temp Avg. Max.												
		Water Temp Avg. Min.												
F1-9053	Tulelake	Evap.	9.86	8.43	6.80	3.66	-	-	-	-	-	-	7.44	6.8
		Wind Movement												
		Water Temp Avg. Max.												
		Water Temp Avg. Min.												

TABLE A-5
STORAGE GAGE PRECIPITATION DATA FOR 1963-64
NORTH COASTAL AREA

Station	Agency	1963-64 Season		
		Date Charged	Date Measured	Precipitation in Inches
Beswick 7 S	US Weather Bureau	7/26/63	7/18/64	44.34
Blue Creek Mountain Lookout	To be published in Bulletin No. 130-65			
Boardcamp Mountain	DWR Northern Branch	9/21/63	6/30/64	97.45
Bray 10 WSW	US Weather Bureau	7/26/63	7/18/64	25.48
Camp Six Lookout	DWR Northern Branch	9/20/63	6/30/64	88.57
Crowder Flat	DWR Northern Branch	7/3/63	7/8/64	16.72
Gazelle Lookout	DWR Northern Branch	5/16/63	7/1/64	14.67
Long Bell Station	DWR Northern Branch	7/4/63	7/10/64	20.31
Medicine Lake	US Weather Bureau	7/25/63	7/17/64	37.50
Mumbo Basin	DWR Northern Branch	6/26/63	7/1/64	40.68

APPENDIX B

SURFACE WATER FLOW

SURFACE WATER FLOW

The Surface Water Measurement Program is a long-term, continuing, basic data activity of the Department, providing accurate measurements of water stages and corresponding streamflow discharges.

The program incorporates both field and office activities. The field activities include the installation and maintenance of gaging stations as well as the actual measurement of streamflow. The office work includes the preparation of data for computation by machine methods. This consists of developing a rating curve for each streamflow station from a series of instantaneous discharge measurements, and a related formula. Manual computation of discharge is required when the direct stage-discharge relationship has been destroyed by ice forming on the control or by backwater from a tributary or control structure downstream.

Definition of Terms

The following terms are commonly used:

Cubic foot per second is the unit rate of discharge of water. It is a measure of a cubic foot of water passing a given point in one second.

Acre-foot is the quantity of water required to cover one acre to a depth of one foot. It is equivalent to 43,560 cubic feet or 325,850 gallons.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, which is enclosed by a drainage divide.

Water year is the 12-month period from October 1 of one year through September 30 of the subsequent year and is normally designated by the calendar year in which it is terminated.

Explanation of Streamflow Tables

The data shown in Table No. B-1 have been determined from observations during the current year by Department personnel. Measurement procedures which have been employed are consistent with those used by the U. S. Geological Survey.

Accuracy of the flow records range between "excellent" (less than 5 percent error) and "good" (less than 10 percent error). The records of monthly and seasonal mean discharge and runoff are generally more accurate than the daily flow records.

When flows at a single station are in excess of 140 percent of the highest measurement on the rating curve, the computed daily mean discharges from the electronic computer are shown as "estimates". Normally, the rating is good where there is a fixed channel and flow regimen at the station. The rating varies where aquatic growth or shifting sands are present. Where the rating is not permanent more frequent measurements of discharge are necessary.

Locations of individual measurement stations are given in the tables of flow. Location numbers have been assigned in accordance with the Department's "Hydrologic Procedures Manual".

The location number is a six-digit number. The first letter designates the hydrographic area; the first number the river basin; the second number the reach of the stream. The last three numbers are sequence numbers assigned to a specific station. The sequence numbers begin at the downstream end of the reach.

The streamflow tables are arranged in a downstream order. Stations on a tributary entering between two main stem stations are listed between

those stations and in downstream order. A stream gaging station normally derives its name from the stream and the nearest post office (e.g., Weaver Creek near Douglas City).

An automatic water stage recorder is in operation at all of the Department's gaging stations in the North Coastal Area.

Following are the significant figures used in reporting streamflow data, consistent with the accuracy of measurements obtained:

1. Daily flow - Cubic feet per second

0.0 - 9.9	Tenths
10 - 99	2 Significant figures
100 - above	3 Significant figures

2. Mean flow - Cubic feet per second

0.0 - 99.9	Tenths
100 - 999	3 Significant figures
1000 - above	4 Significant figures

The water year totals reported to a maximum of four significant figures.

Station descriptions and historical data are provided at the bottom of each table of flow. Gage heights are in feet above assumed "local" datum planes.

The eight surface water measurement stations measured by the Department in the North Coastal Area are located on Figure B-1.

INDEX TO GAGING STATIONS

1 Little Shasta River near Montague
2 Shasta River at Edgewood
3 Etna Creek near Etna
4 Moffett Creek near Fort Jones
5 Browns Creek near Douglas City
6 Weaver Creek near Douglas City
7 North Fork Trinity River at Helena
8 Big Creek near Hayfork

INDEX TO SAMPLING STATIONS

1a Shasta River near Yreka
1b Scott River near Fort Jones
1c Klamath River above Hamburg Reservoir Site
1d Butte Creek near MacDoel
1e Antelope Creek near Tennant
1f Klamath River below Iron Gate Dam
2a Salmon River at Somesbar
2b Klamath River near Seiad Valley
2c Klamath River at Orleans
3 Klamath River near Klamath
3a Smith River near Crescent City
3b Redwood Creek at Orick
4 Trinity River near Hoopa
4a Trinity River at Lewiston
4b Trinity River near Burnt Ranch
5 Eel River near McCann
5a Van Duzen River near Bridgeville
5b Outlet Creek near Longvale
5c Eel River, Middle Fork at Dos Rias
5d Eel River near Dos Rios
6 Eel River at Scotia
6a Mad River near Arcata
7 Eel River, South Fork near Miranda
7a Mattole River near Petrolia
7b Bear River near Capetown

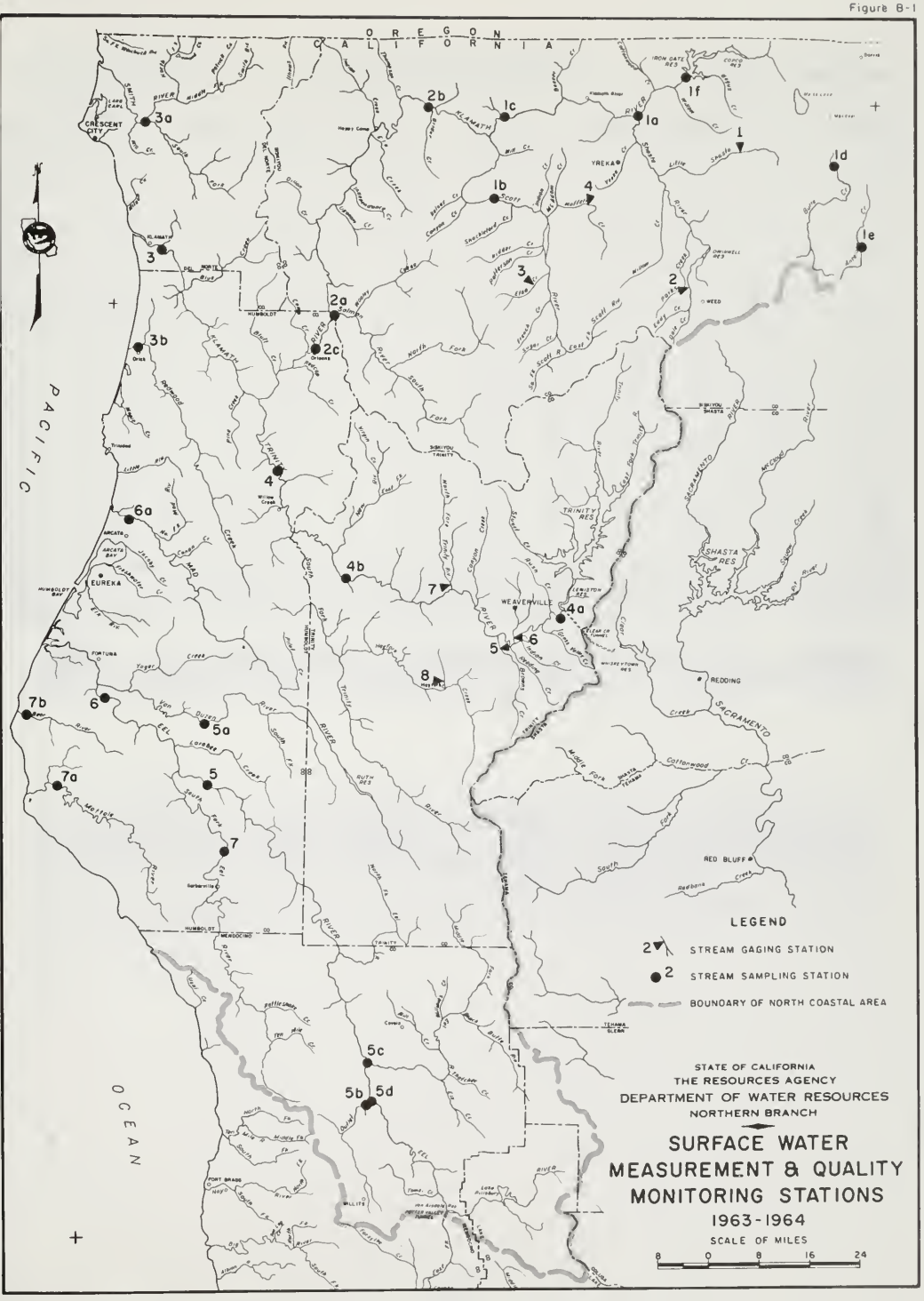

OREGON
CALIFORNIA
PACIFIC
OCEAN
CRESCENT CITY
EUREKA
ARCATA
FORTUNA
WEAVERVILLE
REDDING
RED BLUFF
TRINITY RES.
SHASTA RES.
LEWISTON RES.
IRON GATE RES.
COPCO RES.
DWINNELL RES.
KLAMATH RIVER
TRINITY RIVER
SACRAMENTO RIVER
SOUTH FORK EEL RIVER
MAD RIVER
MIDDLE FORK EEL RIVER
SOUTH FORK TRINITY RIVER
HUMBOLDT BAY
ARCATA BAY
LEGEND
STREAM GAGING STATION
STREAM SAMPLING STATION
BOUNDARY OF NORTH COASTAL AREA
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
NORTHERN BRANCH
SURFACE WATER
MEASUREMENT & QUALITY
MONITORING STATIONS
1963-1964
SCALE OF MILES
8 0 8 16 24

TABLE B-1

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1964	F21700	SHASTA RIVER AT EDGEWOOD

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	13	29	71	76	82	49	37	23	48	15	4.4	9.0	1
2	12	29	70	75 *	76	47	34	26	49	15	4.6	8.2	2
3	12	30	72	70	73	46	32	29	50	14	4.4	8.0*	3
4	13	34	71	70	72	47	30	31	51	14	4.5	8.3	4
5	14	81	72	66	70	47	30	29	53	14	4.2	6.3	5
6	16	88	71	70	68	47	28	32	81	14	4.0	7.5	6
7	15	70	68	69	68	45	27	29	103	12	4.0	8.7	7
8	14	83	69	66	68	43	26	27	132	11	3.8	8.7	8
9	15	99	69	67	66	45	26	26	98 *	11	3.9	8.3	9
10	17	76	63 *	69	67	43	24	26	86	10	4.0	8.0	10
11	50	68	59	66	66	47	23	26	81	9.8	3.6	7.7	11
12	33	65 *	60	68	64	47	21	24 *	71	9.5	3.1	8.1	12
13	28	78	61	68	64	46	20	26	68	9.1	2.7	8.6	13
14	26	328	61	68	61	47	19	25	64	8.6	3.6	9.3	14
15	25 *	192	61	65	60	47	20	25	62	8.2	4.0	9.2	15
16	25	129	60	67	60	45	20	26	58	7.8	5.4	8.6	16
17	25	107	62	69	58	40	22	30	56	7.8	5.5	7.5	17
18	24	96	60	69	57	39	22	30	51	7.6	3.7	7.7	18
19	25	130	60	91	57	35	21	31	48	8.2	4.7	7.7	19
20	25	105	62	503	57	33	20	34	44	7.8	5.0	8.1	20
21	25	91	61	141	55	34	20	37	38	7.6	3.9	7.9	21
22	27	86	61	101	55	35	20	36	36	7.2	4.7	7.0	22
23	35	107	58	90	54	34	21	36	30 *	6.8	5.5	6.6	23
24	31	94	57	83	53	36 *	20	37	23	6.4	4.3	6.5	24
25	28	83	57	88	51	34	20	40	20	5.7	4.6	5.8	25
26	27	84	59	83	48	32	20	42	20	5.5	4.8	4.6	26
27	26	83	63	81	47	32	21	59	21	5.6	5.7	5.5	27
28	26	80	103	78 *	48	31	20	66	20	5.1*	5.5	6.3	28
29	28	77	94	79	48	31	21	57	18	5.0	5.3	6.3	29
30	27	75	82	78		31	22	51	17	4.6	7.2	7.3	30
31	28		79	77		32		48		4.6	8.6		31
MEAN	23.7	92.6	67.0	90.7	61.1	40.2	23.6	34.3	53.2	9.0	4.6	7.6	MEAN
MAX.	50.0	328	103	503	82.0	49.0	37.0	66.0	132	15.0	8.6	9.3	MAX.
MIN.	12.0	29.0	57.0	65.0	47.0	31.0	19.0	23.0	17.0	4.6	2.7	4.6	MIN.
AC. FT.	1458	5508	4118	5576	3517	2473	1402	2110	3168	552	284	451	AC. FT.

E - ESTIMATED
NR - NO RECORD
* - DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW MADE THIS DAY
# - E AND *

MEAN	MAXIMUM				MINIMUM				TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
42.2	901	5.35	1	20	0330	2.0	1.94	8	24	1850	30620

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
41 28 20	122 26 18	SE20 42N 5W	2520 E	7.37	10/12/62	MAR 61-DATE	MAR 61-DATE	1961		0.00	LOCAL

Station located on downstream side of Edgewood Road bridge, 1.2 miles north of Edgewood. Tributary to Dwinnell Reservoir. Stage-discharge relationship at times affected by ice.

TABLE B-1 (Continued)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1964	F21300	LITTLE SHASTA RIVER NEAR MONTAGUE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	3.2 E	3.1	4.0	7.2	27	13	70 #	40	38	17	8.0	5.0	1
2	3.1 E	3.0	3.8 E	8.0*	22	12	42	36	38	16	7.2	4.7	2
3	3.3 E	3.0	3.4 E	5.4	17	12	33	34	37	15	6.7	4.4*	3
4	3.3 E	3.6	3.8 E	4.4	19	36	36	31	40	16	6.5	4.0	4
5	3.3 E	4.5	3.6	4.4 E	20	32	38	30	37	16	6.2	3.8	5
6	3.4 E	4.0	4.1	4.9	16	20	32	29	69 E	15	6.2	4.2	6
7	3.4 E	3.5	3.8 E	5.5	15	17	37	29	106 E	14	6.1	3.9	7
8	3.4 E	9.8	4.1	4.3	14	16	50	29	83 E	13	5.3	4.1	8
9	3.6 E	17	3.6	5.3	15	17	52	35	89 #	13	5.4	4.2	9
10	3.3 E	6.2	1.9 #	4.8	17	15 *	47	40	64	13	5.6	3.8	10
11	3.3 E	4.3	1.2 E	5.0 E	16	14	54	42	52	13	5.4	3.7	11
12	3.4 E	4.2	2.0 E	5.0 E	14	12	51	46 *	46	12	5.6	3.6	12
13	3.4 E	4.6	2.0 E	5.0 E	12	12	51	46	42	12	5.4	3.3	13
14	3.3 E	16	2.0 E	5.1	12	12	57 E	44	38	12	5.0	3.2	14
15	3.3 #	11	2.0 E	5.0 E	11	17	65 E	44	39	12	5.0	3.5	15
16	3.3	6.3	2.0 E	5.4	10	22	62 E	42	37	11	4.9	3.5	16
17	3.1	5.5	2.0 E	4.5	9.8	32	48	43	39	9.7	5.0	3.6	17
18	3.1	5.2	2.0 E	3.9	12	34	42	43	35	9.7	4.6	3.7	18
19	3.3	4.8	3.9	7.1	15	30	40	44	32	9.5	4.5	3.6	19
20	3.3	4.2	4.5	49 E	16	27	40	44	30	9.3	4.4	3.8	20
21	3.1	3.7	3.9	17	17	22	43	43	28	9.0	4.3	3.6	21
22	4.5	3.8	3.8	12	19	19	41	42	26	8.1	4.5	3.3	22
23	5.8	4.8	3.8	9.4	19	17	34	40	25 *	8.3	4.4	3.3	23
24	3.7	5.5	3.7	8.6	20	16	30	40	24	7.9	4.5	3.6	24
25	3.7	5.5	3.6	9.2	17	15	26	40	22	7.8	4.5	3.4	25
26	3.7	5.6	3.4	11	15	16	29	39	20	7.8	4.5	3.0	26
27	3.3	6.3	5.9	11	15	20	35	46	20	7.0	4.5	3.2	27
28	3.1	5.0	20	10	15 *	33	46	51	19	7.3	4.5	3.1	28
29	3.3	4.6	15	11	13	41	52	43	17	9.4	4.5	3.0	29
30	3.4	4.4	10	12		44	43	41	17	9.5	4.5	3.0	30
31	3.4		8.6	14		44		39		7.4	4.5		31
MEAN	3.5	5.8	4.6	8.8	15.9	22.2	44.2	39.8	40.3	11.2	5.2	3.7	MEAN
MAX.	5.8	17.0	20.0	49.0E	27.0	44.0	70.0E	51.0	106 E	17.0	8.0	5.0	MAX.
MIN.	3.1	3.0	1.2 E	3.9	9.8	12.0	26.0	29.0	17.0	7.0	4.3	3.0	MIN.
AC. FT.	212	343	280	544	912	1367	2630	2450	2398	690	322	218	AC. FT.

E - ESTIMATED
NR - NO RECORD
* - DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW MADE THIS DAY
\# - E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
17.0	147 E	3.17	6	7	0430	0.5	1.51	12	7	1110	12370

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B &M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
41 45 11	122 17 58	NW15 45N 4W	741 E	4.76	11/13/57	28-NOV 51 8 APR 52-APR 55 SEP 56-DATE	28-NOV 51 8 APR 52-APR 55 SEP 56-DATE	1956		0.00	LOCAL

Station located south of Ball Mountain Road, 12 miles northeast of Montague, 16 miles southwest of Macdoel. Stage-discharge relationship at times affected by ice. Drainage area is 48.1 square miles.

8 - Irrigation season only

TABLE B-1 (Continued)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1964	F25620	ETNA CREEK NEAR ETNA

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DA
1	2.1*	5.6	47	71	86	44	88 *	114	128	22	8.7	5.0	1
2	1.6	6.2	44	63	74	39	74	101	120	21	8.3	4.2	2
3	1.8	7.4	41	55	67	38	66	92	112	21	7.3	3.5	3
4	2.3	20	38	50	63	42	65	83	118	23	6.6	2.9	4
5	4.2	19	37	46	63	42	67	77	125	20	6.4	2.7	5
6	6.8	24	50	48	60	40	63	71	130	18	6.0	2.6	6
7	4.0	21	42	47	58	38	66	68	118	16	5.5	2.4	7
8	3.7	374 E	44	42	56	37	77	71	101	16	5.7	2.4	8
9	3.8	200	40	41	55	37	88	85	92 *	14	5.4	2.3	9
10	3.9	89	36 *	38	55	36 *	85	111	88	13	5.2	2.4	10
11	7.6	61	33	36	54	39	88	130	85	12	4.7	2.1	11
12	4.9	46	32	34	50	37	92	155 *	84	12	4.5	2.1	12
13	4.3	42	31	34	48	35	97	161	84	11	4.9	2.1	13
14	4.0	182	30	32	46	35	108	148	82	12	5.0	2.0	14
15	5.3	130	29	31	44	35	126	149	76	12	4.9	1.9	15
16	5.4	88	27	37	43	35	126	148	69	12	5.0	1.9	16
17	4.5	71	27	36	40	39	112	141	61	13	4.6	1.9	17
18	4.1	58	26	35	39	43	104	147	56	13	4.4	2.1	18
19	3.8	54	28	53	40	44	98	169	50	13	4.3	1.8	19
20	3.9	46	34	108	40	46	97	170	47	12	4.4	2.1	20
21	5.2	40	28	68	41	46	103	153	44	11	4.2	2.1	21
22	12	45	27	52	42	43	101	141	42	11	3.8	1.9	22
23	12	126	27	45	44	40	91	139	41	9.5	3.7	1.6	23
24	7.8	92	26	43	45	39	82	145	39	8.4	3.5	1.6	24
25	15	72	26	49	44	38	78	147	36	8.1	3.4	1.4	25
26	8.7	77	32	48	43	37	84	131	33	7.8	3.5	1.4	26
27	7.3	79	60	45	43	39	99	117	30	7.3	3.6	1.5	27
28	6.5	70	109	42	43	44	133	109	28	7.5*	3.4	1.5	28
29	6.7	61	102	48	41	55	151	112	26	8.1	3.7	1.4	29
30	6.0	53	86	49		67	131	116	24	7.8	3.8	1.5	30
31	5.7		77	60		79		130		7.9	4.3		31
MEAN	5.6	75.3	42.5	47.9	50.6	42.2	94.7	124	72.3	12.9	4.9	2.2	ME
MAX.	15.0	374 E	109	108	86.0	79.0	151	170	130	23.0	8.7	5.0	MA
MIN.	1.6	5.6	26.0	31.0	39.0	35.0	63.0	68.0	24.0	7.3	3.4	1.4	MI
AC. FT.	347	4481	2610	2947	2910	2594	5633	7599	4302	794	303	132	AC.

E – ESTIMATED
NR – NO RECORD
* – DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW MADE THIS DAY
# – E AND *

MEAN	MAXIMUM				MINIMUM				TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
47.7	634 E	9.76	11	8	1750	0.9	6.17	9	25	2010	34650

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
41 25 53	122 54 57	NE6 41N 9W	4040 E	10.87	2/8/60	SEP 50-JUN 55 JUN 56-DATE	SEP 50-JUN 55 JUN 56-DATE	1957		0.00	LOCAL

Station located south of Sawyers Bar-Etna Highway, 2.1 miles southwest of Etna. Tributary to Scott River. Stage-discharge relationship at times affected by ice. Flow influenced by upstream diversion dam of Town of Etna. Drainage area is 20.1 square miles.

TABLE B-1 (Continued)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1964	F25420	MOFFETT CREEK NEAR FORT JONES

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.7	2.9 E	8.1	8.9	38	20	35 *	15	3.2	2.7	0.0	0.2	1
2	0.7	2.9 E	6.5	7.8*	39	20	34	15	2.7	3.4	0.0	0.1	2
3	0.9	2.9 E	6.0	7.6	39	19	33	16	2.2	3.9	0.0	0.2	3
4	1.1	2.9 E	5.8	8.1	37	19	31	16	2.5	4.8	0.0	0.1	4
5	1.1	2.9 E	6.0	8.1	37	20	31	16	2.9	4.2	0.0	0.1	5
6	1.1	2.9 E	5.2	7.8	35	20	30	15	3.2	3.1	0.0	0.1	6
7	1.1	2.9 E	5.2	7.9	33	20	28	16	3.2	2.5	0.1	0.3	7
8	1.0	2.7 E	5.4	7.9	32	19	27	16	4.0	2.6	0.2	0.3	8
9	0.8	2.7 E	5.8	7.9	30	19	28	14	4.2*	2.5	0.1	0.3	9
10	0.8	2.7 E	5.5	8.1	30 *	19	28	13	4.8	2.4	0.1	0.3	10
11	1.4	2.7 E	5.4	7.9	29	20	27	12	4.6	2.4	0.0	0.6	11
12	1.2	2.8 #	4.7	7.8	28	20	27	11	4.6	2.7	0.0	0.3	12
13	1.1	2.9	4.7	8.1	27	20	26	10	4.7	2.3	0.0	0.1	13
14	1.2	4.5	4.5	8.1	25	20	25	9.6	4.6	2.1	0.0	0.1	14
15	1.7*	4.8	4.6	8.1	25	21	24	9.4	4.9	2.3	0.0	0.1	15
16	1.7	4.8	4.5	9.3	24	21	23	9.3	4.6	2.2	0.0	0.2	16
17	1.3	5.3	4.8	12	23	22	19	9.1	4.8	1.8	0.1	0.6	17
18	1.8	5.3	5.0	15	22	23	17	8.4	5.0	1.9	0.1	0.8	18
19	1.8	5.2	4.8	32 E	22	24	18	7.7	5.0	2.0	0.1	0.4	19
20	1.7	5.0	5.0	229 E	22	25	20	7.4	4.6	2.4	0.2	0.3	20
21	1.9	5.0	5.0	110 E	21	26	20	7.3	4.4	2.3	0.1	0.3	21
22	2.3	5.3	4.8	68 E	21	27	20	6.3	4.1	1.6	0.1	0.3	22
23	2.5	8.6	4.8	45 E	20	26	19	5.0	3.9	1.3	0.1	0.2	23
24	2.4	8.7	4.9	35	20	25	18	5.0	4.1	1.0	0.2	0.0	24
25	3.4 E	8.1	4.8	32	19 *	25	16	4.9	3.8	0.6	0.1	0.0	25
26	3.4 E	7.8	4.7	32	19	24	15	4.7	3.3	0.5	0.1	0.0	26
27	3.4 E	7.4	5.0	33	19	24	15	5.5	3.1	0.3	0.1	0.1	27
28	3.4 E	7.3	6.2	33 *	19	24	13	6.1	3.3	0.1	0.1	0.2	28
29	3.4 E	7.1	6.9	33	19	26	13	5.3	3.3	0.1	0.1	0.2	29
30	2.9 E	6.8	7.1	33		28	14	2.3	3.1	0.0	0.1	0.2	30
31	2.9 E		7.8	36		31		2.5		0.0	0.1		31
MEAN	1.8 E	4.8	5.5	29.3	26.7	22.5	23.1	9.7	3.9	2.0	0.1	0.2	MEAN
MAX.	3.4	8.7	8.1	229 E	39.0	31.0	35.0	16.0	5.0	4.8	0.2	0.8	MAX.
MIN.	0.7	2.7 E	4.5	7.6	19.0	19.0	13.0	2.3	2.2	0.0	0.0	0.0	MIN.
AC. FT.	111	285	336	1407	1535	1382	1377	597	231	123	4	14	AC. FT.

E – ESTIMATED
NR – NO RECORD
* – DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW MADE THIS DAY
# – E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
10.7	480 E	4.54	1	20	0210	0.0		7	27	2400	7796

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
41 38 01	122 44 46	NE27 44N 8W		4.54	1/20/64	OCT 52-OCT 54 JUN 57-DATE	OCT 52-OCT 54 JUN 57-DATE	1957		0.00	LOCAL

Station located 90 feet above Old Fort Jones-Yreka Highway bridge, 5.1 miles northeast of Fort Jones. Tributary to Scott River.
Stage-discharge relationship at times affected by ice. Drainage area is 69.8 square miles.

TABLE B-1 (Continued)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1964	F41540	WEAVER CREEK NEAR DOUGLAS CITY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DA
1	1.5	7.0	40	28	224	44	44	35	20	6.4	1.0	1.5	1
2	1.5	7.2	36	26	172	41	41	33	18	5.5	1.0	1.3*	2
3	1.4	10	33	21	140	38	39 E	35	18	5.0	1.0	1.4	3
4	1.3	30	30	18	124	37	39 E	31	19	5.3	0.9	1.0	4
5	3.1	18	28	15	120	36	40 E	29	27	5.4	0.7	0.9	5
6	5.3	45	29	41	105	35	39 E	30	26	4.5	0.7	0.7	6
7	4.6	26	27	40	94	34	39 E	28	25	4.1	0.7	0.7	7
8	4.0	88	28	25	86	34	39 E	27	23	3.7	0.7	0.6	8
9	3.7	93	28	21	78	35	38 E	26	25	4.4	0.8	0.7	9
10	4.9	41	25	19	80	33	37 E	27	23	4.1	0.7	0.8	10
11	15	29	24	15	75	41	39 E	29	20	3.7	0.5	0.8	11
12	7.6	23	21 *	13	71	49	39 E	30	17	3.1	0.5	0.7	12
13	6.4	29	20	13	66 *	46	39 E	31	15	3.0	0.5	0.6	13
14	5.8	196 *	19	11	61	41	37 #	30	14	2.7	0.5	0.6	14
15	11	78	18	9.6	60	41	39	30	12	3.3	0.4	0.7	15
16	11	49	17	11	55	40	38	30	12	3.7	0.3	0.6	16
17	7.7*	37	16	27	50	40	38	30	12	3.0	0.4	0.6	17
18	7.2	30	14	41	47	42	35	29	12	2.4	0.4*	0.8	18
19	6.3	90	15	52	45	41	34	28	12	2.3	0.4	0.8	19
20	6.3	68	21	3190 E	43	41	35	29	11	2.0	0.4	0.7	20
21	7.3	46	17	354	46	41	36	26	9.9	1.8	0.3	0.7	21
22	8.2	41	15	231	44	43	36	25	8.9	1.7	0.3	0.6	22
23	13	161	14	166	44	41	37	24	8.4	2.1	0.2	0.7	23
24	11	110	13	137	44	39	34	24	7.5	1.9	0.1	0.7	24
25	11	73	12	122	42	37	34	23	6.7	1.5	0.1	0.7	25
26	9.3	65	12	127	39	36	31	23 *	5.8	1.3	0.0	0.6	26
27	8.4	60	34	124	38 *	36	31	23	6.1	1.0	0.1	0.6	27
28	7.2	55	80	118	37	36	31	23	6.5	1.1	0.2	0.6	28
29	7.7	50	64	137	36	37	36	24	6.4	1.8	0.2	0.6	29
30	7.4	45	40	139 *		38	35	21	6.5	1.4	0.3	0.6	30
31	6.7		32	169		41		20		1.3	0.6		31
MEAN	6.9	56.7	26.5	176	74.7	39.2	37.0	27.5	14.5	3.0	0.5	0.8	ME
MAX.	15.0	196	80.0	3190 E	224	49.0	44.0	35.0	27.0	6.4	1.0	1.5	MA
MIN.	1.3	7.0	12.0	9.6	36.0	33.0	31.0	20.0	5.8	1.0	0.0	0.6	MI
AC. FT.	422	3372	1630	10830	4296	2408	2200	1692	860	187	30	45	AC

E - ESTIMATED
NR - NO RECORD
* - DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW MADE THIS DAY
# - E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
38.5	10700 E	11.32	1	20	0950	0.0		8	25	2400	27970

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B &M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
40 40 13	122 56 33	SE36 33N 10W	10,700 E	11.32	1/20/64	JAN 57-DATE	JAN 57-DATE	1957		0.00	LOCAL

Station located 0.2 mile below State Highway 299 bridge, 1.2 miles north of Douglas City, 4.2 miles south of Weaverville. Tributary to Trinity River. Drainage area is 48.4 square miles.

TABLE B-1 (Continued)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1964	F41510	BROWNS CREEK NEAR DOUGLAS CITY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	4.8	13	81	49	229	50	53	26	15	7.3	2.2	2.1	1
2	4.5	13	72	48	230	46	51	27	14	6.6	2.3	3.7*	2
3	4.1*	14	65	44	205	43	48	29	14	6.1	2.2	4.0	3
4	4.5	66	60	42	182	43	44	28	16	6.0	2.4	3.6	4
5	5.7	47	55	40	175	44	41	26	18	4.9	2.2	1.9	5
6	11	93	53	46	157	44	40	24	18	6.0	2.3	2.2	6
7	9.7	77	50	57	142	42	36	21	17	6.0	2.1	1.6	7
8	8.7	76	49	52	129	39	36	20	16	5.4	2.3	1.5	8
9	9.0	86	50	51	121	39	37	19	17	4.8	2.6	1.9	9
10	13	68	45	50	115	39	36	19	17	4.9	1.9	2.2	10
11	29	52	42	47	111	44	35	19	16	4.7	1.9	2.6	11
12	16	40	40 *	46	108	46	36	18	14	4.1	2.0	2.9	12
13	13	39	38	47	102 *	43	34	18	14	4.0	2.2	2.7	13
14	12	295	37	46	96	42	34 *	18	13	4.0	1.9	2.8	14
15	26	214	35	43	92	45	33	17	12	4.1	2.0	2.6	15
16	48	111	34	45	86	45	35	18	12	4.5	1.7	2.8	16
17	20	84	33	54	80	45	34	21	12	4.2	1.5	2.7	17
18	16	69	32	75	74	47	33	18	12	3.4	1.7*	2.9	18
19	14	95	33	85	71	46	30	18	11	4.2	1.7	2.6	19
20	13	102	45	937	68	45	29	18	10	3.8	1.4	2.3	20
21	13	87	39	586	64	46	29	18	9.9	3.8	1.4	2.8	21
22	13	80	36	346	60	48	27	16	8.6	2.6	1.3	2.6	22
23	14	105	35	236	57	47	27	16	8.0	2.5	1.1	2.3	23
24	14	116	34	190	56	46	28	16	7.5	2.8	1.1	2.3	24
25	15	107	33	160	53	43	27	16	7.1	2.2	1.0	2.1	25
26	14	112	34	146	50	43	27	16 *	7.0	1.9	1.1	2.2	26
27	14	128	41	140	47 *	43	26	16	6.8	1.8	2.0	2.8	27
28	13	116	48	139	46	43	26	17	7.0	1.5	2.3	3.2	28
29	13	99	53	142	44	44	25	17	7.6	2.6	1.8	3.5	29
30	13	89	51	146		46	25	16	7.8*	3.2	0.8	3.4	30
31	13		50	159		47		15		2.2	0.7		31
MEAN	13.9	89.8	45.3	139	105	44.3	34.1	19.5	12.2	4.1	1.8	2.6	MEAN
MAX.	48.0	295	81.0	937	230	50.0	53.0	29.0	18.0	7.3	2.6	4.0	MAX.
MIN.	4.1	13.0	32.0	40.0	44.0	39.0	25.0	15.0	6.8	1.5	0.7	1.5	MIN.
AC. FT.	855	5341	2783	8517	6050	2723	2027	1196	725	250	109	156	AC. FT.

E – ESTIMATED
NR – NO RECORD
* – DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW MADE THIS DAY
# – E AND *

MEAN	MAXIMUM				MINIMUM				TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO	DAY	TIME	ACRE FEET
42.3	1660	13.37	1	20	1250	0.6	7.7	8	26	0000	30730

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
40 38 35	122 58 46	SE10 32N 10W	3950 E	16.60	2/18/58	JAN 57-DATE	JAN 57-DATE	1957		0.00	LOCAL

Station located at private bridge, 2.1 miles west of Douglas City. Tributary to Trinity River. Stage-discharge relationship at times affected by ice. Drainage area is 71.4 square miles.

TABLE B-1 (Continued)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1964	F42100	NORTH FORK TRINITY RIVER AT HELENA

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	24	69	419	494	1340	353	513	331	345	134	56	35	1
2	24	69	380	465	1140	333	454	291	309	127	54	33 *	2
3	24 *	72	349	409	941	313	398	280	289	124	50	29	3
4	23	207	325	373	868	349	375	258	353	122	45	24	4
5	32	216	309	340	906	418	385	249	495	116	43	20	5
6	72	411	341	390	835	396	364	233	475 E	114	44	17	6
7	52	306	313	515	734	360	351	228	467	114	40	16	7
8	38	2660	305	474	671	332	380	231	316	117	39	17	8
9	43	2310	300	439	647	325 *	414	271	269	112	39	17	9
10	62	822	272	403	649	303	399	334	257	107	37	15	10
11	229	510	253	369	619	322	403	368	247 *	102	35 *	13	11
12	115	384	238 *	347	571	323	406	407	256	100	34	13	12
13	81	352	231	329	528	311	410	404	269	104	34	12	13
14	67	2420 *	220	303	489	311	460 *	367 *	278	103	33	13	14
15	205	1530	213	283	471	342	523	356	266	105	32	12	15
16	223	856	203	294	434	375	521	379	237	99	30	13	16
17	116	615	191	358	407	424	450	334	206	92	29	11	17
18	85	492	183	483	400	488	404	335	190	87	27 *	12	18
19	71	579	190	548	390 E	466	376	372	181	83	27	12	19
20	64	602	238	3400	385 E	463	361	406	182	79	27	12	20
21	98	491	229	1830	379 E	451	369	365	182	75	26	10	21
22	127	425	220	1030	375 E	423	374	355	177	73	25	9.4	22
23	261	476	213	721	371 E	388 *	333	364	192	66	23	7.9	23
24	152	498	205	607	365 E	351	296	373	201	64	22	8.4	24
25	248	547	205	546	361 E	315	276	371	189	61	21	8.5	25
26	171	652	211	519	361 E	299	278	370	181	61	21	7.5	26
27	122	720	447	518	365 *	301	302	327	160	61	22	7.7	27
28	97	634	908	539	350	320	396	283	141	61	22	9.5	28
29	93	543	972	606	328	369	469	284	137	69	23	10	29
30	84	471	694	716 *		434	377	309	134 *	65	23	10	30
31	77		562	796		501		350		59	23 E		31
MEAN	103	698	334	627	575	370	394	329	253	92.1	32.5	14.5	MEAN
MAX.	261	2660	972	3400	1340	501	523	407	495	134	56.0	35.0	MAX
MIN.	23.0	69.0	183	283	328	299	276	228	134	59.0	21.0	7.5	MIN
AC. FT.	6307	41530	20510	38570	33080	22730	23440	20200	15040	5665	1995	863	AC. FT.

E – ESTIMATED
NR – NO RECORD
* – DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW MADE THIS DAY
# – E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
317	4820	13.49	1	20	0640	5.8	6.9	9	26	1540	229900

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
40 46 56	123 07 39	SW21 34N 11W	13500	19.66	1/12/59	JAN 57-DATE	JAN 57-DATE	1957		0.00	LOCAL

Station located 1.0 mile above mouth, 0.6 mile north of Helena. Stage-discharge relationship at times affected by ice. Drainage area is 151 square miles.

TABLE B-1 (Continued)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1964	F44500	BIG CREEK NEAR HAYFORK

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	1.3	7.4	36	25	163	36	41	23	11	2.1	0.0	1.1	1
2	1.1	7.8	32	26	149	34	38	21	8.5	3.2	0.0	0.2	2
3	0.9*	8.5	29	22	122	32	36	19	7.4	5.4	0.0	0.0	3
4	0.9	22	27	22	112	33	35	16	9.5	6.8	0.6	0.0	4
5	3.0	20	25	21	111	34	36	19	11	5.9	0.5	0.0	5
6	2.6	40	23	30	105	33	34	8.0	13	5.6	0.0	0.0	6
7	2.9	26	21	37	96	31	34 *	4.4	13	5.0	0.0	0.4	7
8	2.0	62	21	33	88	30	33	5.5	12	2.1	0.0	0.1	8
9	0.0	79	22	32 *	84	31 *	33	6.1	12	2.0	0.0	0.5	9
10	0.2	41	20	30	81	30	33	4.8	12	1.9	0.7	0.8	10
11	8.5	28	19	28	74	33	34	4.3	9.3*	2.8	0.1*	0.6	11
12	8.1	24	20	28	68	34	32	4.8	7.1	3.1	0.0	0.7	12
13	6.6	24	17	29	63	32	31	7.0	3.7	3.4	0.0	0.0	13
14	7.0	100 *	18	28	59	31	32	6.2*	3.5	2.3	0.2	0.5	14
15	18	87	17	26	58	32	32	6.6	2.8	0.0	0.0	0.9	15
16	17	55	17	29	54	33	31	5.7	2.5	0.0	0.0	0.9	16
17	9.3*	43	17	38	51	35	32	5.1	3.5	0.0	0.0	0.6	17
18	7.8	35	17	46	49	38	31	5.0	1.4	0.0	0.0	0.7	18
19	6.3	71	18	61	45	37	31	5.7	0.8	0.0	0.4	0.5	19
20	6.8	56	24	411 E	44	36	29	4.7	0.7	0.0	0.0	0.3	20
21	8.1	43	21	219 E	42	36	27	3.6	1.3	0.0	0.0	0.7	21
22	8.5	38	20	134	42	36	25	4.4	0.3	0.0	0.0	0.8	22
23	12	78	17	98	41	34	28	4.1	0.6	0.0	0.0	0.4	23
24	10	66	16	83	40	36	27	3.7	0.3	0.0	0.0	0.8	24
25	10	61	16	79	39	33	26	4.0	0.6	0.0	0.0	0.0	25
26	8.5	62	15	79	38	33	26	10	0.3	0.0	0.0	0.5	26
27	7.9	65	21	76	35	33	26	17	2.1	0.0	0.0	1.4	27
28	7.6	56	28	75	35	34	22	16	6.3	0.2	0.0	1.2	28
29	8.0	47	33	83	34	35	22	15	5.4	0.1	0.0	1.1	29
30	7.5	41	29	91 *		35	22	16	5.5*	0.0	0.0	1.2	30
31	7.8		27	112		38		16		0.1	0.7		31
MEAN	6.7	46.5	22.0	68.7	69.7	33.9	30.6	9.4	5.6	1.7	0.1	0.6	MEAN
MAX.	18.0	100	36.0	411 E	163	38.0	41.0	23.0	13.0	6.8	0.7	1.4	MAX.
MIN.	0.0	7.4	15.0	21.0	34.0	30.0	22.0	3.6	0.3	0.0	0.0	0.0	MIN.
AC. FT.	409	2764	1355	4227	4011	2083	1823	579	332	103	6	34	AC. FT.

E - ESTIMATED
NR - NO RECORD
* - DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW MADE THIS DAY
# - E AND *

MEAN	MAXIMUM				MINIMUM				TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
24.4	773 E	9.64	1	20	0900	0.0		10	3	1810	17720

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
40 33 11	123 08 35	SE7 31N 11W	1540 E	9.25	2/18/58	FEB 57-DATE	FEB 57-DATE	1957		0.00	LOCAL

Station located 30 feet above Hayfork-Douglas City Highway bridge, 2 miles east of Hayfork. Tributary to South Fork Trinity River via Hayfork Creek. Flow influenced by upstream diversion dam of community of Hayfork. Drainage area is 27.3 square miles.

APPENDIX C

GROUND WATER MEASUREMENTS

GROUND WATER MEASUREMENTS

All studies of ground water problems, and plans for the solution of these problems, should be founded upon accurate records of ground water elevations obtained over a period of many years. This is true whether the problem is the determination of the safe yield of a ground water basin, an operation of a basin for cyclic storage in conjunction with surface water supplies, or the control of sea water intrusion.

The Department began the collection of ground water data in 1930, in conjunction with special investigations of water resources of specific areas, and has gradually developed a continuing program of basic data collection. Through cooperative activities with the federal and local agencies, coordinated and augmented by the Department, the program of ground water level measurements has gradually been expanded for adequate coverage in most basins.

Within the North Coastal Area the Department cooperated with the U. S. Geological Survey during the 1963-64 fiscal year in the systematic observation of ground water levels in nine of the more important ground water basins. The field measurements were made by the U. S. Geological Survey; whereas, the review, processing, and editing of the data was accomplished by the Department.

Wells are selected for measurement on the basis of geographical density, length of record, frequency of measurements, conformity to water level fluctuations in the basin and avialability of a well log, mineral analyses and production records.

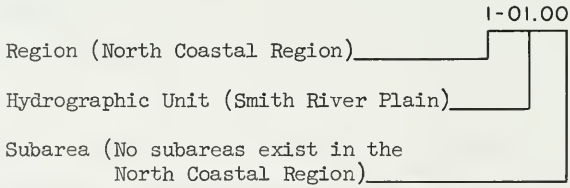
The depth to water in most of the wells is normally a direct measurement made with a tape. However, in some of the deeper wells measurements are made with an air line and gage or an electric sounder.

A summary of the average seasonal change in water levels in the nine ground water basins reported in this appendix are given in Table C-1, "Average Ground Water Level Changes in North Coastal Area Basins". The ground water level measurements collected from the North Coastal Area basins during the 1963-64 fiscal year are included in Table C-2, "Ground Water Level Measurements".

Numbering Systems

Region and Basin Designations. All data presented in this appendix is located within Region 1, a geographic area defined in Section 13040 of the Water Code. The nine ground water basins measured in the program during 1963-64 are shown on Figure C-1.

A decimal system of the form 0-00.0 is used for basin numbering. The number to the left of the dash refers to the geographic region and the first two digits of the number on the right of the dash refer to the hydrographic unit, generally designated as a basin, valley, or area. These are followed by a decimal which shows the subbasin, area, or subarea within the basin, valley, or area. Two zeros following the decimal denotes that there is no subbasin, area, or subarea. An example is given below:



Well Numbering System. The state well numbering system used in this report is based on the township, range, and section subdivision of the United Stated Public Land Survey. It is the system used in all ground water investigations and for numbering all wells for which data is published or filed by the Department. In this report, the number of a well assigned in accordance with this system is referred to as the State Well Number.

Within the system each section is divided into 40-acre tracts lettered as follows:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Wells are numbered within each 40-acre tract according to the chronological sequence in which they have been assigned State Well Numbers. For example, a well which has the number 16N/1W-2J1H would be in Township 16 North, Range 1 West, Section 2, Humboldt Base and Meridan, and would be further designated as the first well assigned a State Well Number in Tract J. In this report well numbers are referenced to the Humboldt Base and Meridian (H), and the Mount Diablo Base and Meridian (M).

Agency Supplying Data. The code number assigned to the U. S. Geological Survey, the sole measuring agency for the wells listed in this appendix, is 5000.

Well Use. The use of water is indicated as follows:

Code	Well Use
(Blank)	Unknown
1	Domestic
2	Irrigation
3	Municipal
4	Industrial
5	Injection or Recharge
6	Drainage
7	Domestic and Irrigation
8	Test
9	Stock
0	Unused

Well Depth. Well depths shown were reported by the owner, obtained from a driller's log or measured at the time of the well canvass.

Reason for Questionable Measurement. If the water level measurement is of questionable reliability, the reason is indicated by the following code preceding the measurement:

Code	Reason
1	Pump operating
2	Nearby pump operating
3	Casing leaking or wet
4	Pumped recently
5	Air or pressure gage measureme
6	Other
7	Recharge operation at or near
8	Oil in casing
0	Caved or deepened

Reason for No Measurement. If no measurement was made at a well scheduled to be measured, the reason for not making the measurement is indicated by the following code:

Code	Reason
1	Pump operating
2	Pump house locked
3	Tape hung up
4	Cannot get tape into casing
5	Unable to locate well
6	Well has been destroyed
7	Special
8	Casing leaking or wet
9	Temporarily inaccessible
0	Measurement discontinued

INDEX OF GROUND WATER BASINS

1.00	Smith River Plain
3.00	Butte Valley
4.00	Shasta Valley
5.00	Scott River Valley
6.00	Hayfork Valley
8.00	Mad River Valley
9.00	Eureka Plain
10.00	Eel River Valley
11.00	Round Valley
12.00	Laytonville Valley
13.00	Little Lake Valley

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
NORTHERN BRANCH

GROUND WATER BASINS
1963 - 1964

SCALE OF MILES
0 30 60

TABLE C-1
AVERAGE GROUND WATER LEVEL CHANGES
IN NORTH COASTAL AREA BASINS
SPRING 1963 - SPRING 1964

Ground Water Basin		Number of Wells Considered in Analysis	Average Ground Water Level Change 1963 to 1964, in feet
Name	Number		
Smith River Plain	1-01.00	4	-2.2
Butte Valley	1-03.00	5	-1.3
Shasta Valley	1-04.00	6	-0.1
Scott River Valley	1-05.00	4	-1.4
Mad River Valley	1-08.00	2	0.0
Eel River Valley	1-10.00	3	-1.4
Round Valley	1-11.00	4	-1.2
Laytonville Valley	1-12.00	3	-1.5
Little Lake Valley	1-13.00	3	-0.6

TABLE C-2

GROUND WATER LEVEL MEASUREMENTS

STATE WELL NUMBER	WELL USE	WELL DEPTH IN FEET	PERIOD OF RECORD BEGIN	PERIOD OF RECORD END	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION 1-00.00									
SMITH RIVER PLAIN 1-01.00									
16N/01W-02J01 H	1	36	53		127.0	7-11-63	18.5	108.5	5000
						8-20-63	20.0	107.0	5000
						9-19-63	20.2	106.8	5000
						10-24-63	18.6	108.4	5000
						11-21-63	15.2	111.8	5000
						12-17-63	16.0	111.0	5000
						1-16-64	15.0	112.0	5000
						2-26-64	15.6	111.4	5000
						3-18-64	15.2	111.8	5000
						4-15-64	16.6	110.4	5000
						5-13-64	16.9	110.1	5000
						6-17-64	17.6	109.4	5000
16N/01W-17K01 H	1	40	53		48.0	7-11-63	(1)		5000
						8-20-63	18.8	29.2	5000
						9-19-63	20.0	28.0	5000
						10-24-63	21.5	26.5	5000
						11-21-63	19.9	28.1	5000
						12-17-63	17.9	30.1	5000
						1-16-64	16.6	31.4	5000
						2-26-64	13.4	34.6	5000
						3-18-64	13.5	34.5	5000
						4-15-64	15.3	32.7	5000
						5-13-64	17.6	30.4	5000
						6-17-64	18.8	29.2	5000
17N/01W-02P01 H	1	27	52		31.0	7-11-63	21.0	10.0	5000
						8-20-63	22.2	8.8	5000
						9-19-63	21.9	9.1	5000
						10-24-63	20.7	10.3	5000
						11-21-63	15.7	15.3	5000
						12-17-63	18.6	12.4	5000
						1-16-64	17.1	13.9	5000
						2-26-64	17.8	13.2	5000
						3-18-64	16.8	14.2	5000
						4-15-64	18.8	12.2	5000
						5-13-64	20.2	10.8	5000
						6-17-64	21.6	9.4	5000
18N/01W-26P01 H	7	28	52		38.0	7-11-63	20.3	17.7	5000
						8-20-63	(7)		5000
						9-19-63	25.7	12.3	5000
						10-24-63	19.6	18.4	5000
						11-21-63	14.3	17.7	5000
						12-17-63	18.2	19.8	5000
						1-16-64	16.7	21.3	5000
						2-26-64	18.7	19.3	5000
						3-18-64	17.2	20.8	5000
						4-15-64	19.6	18.4	5000
						5-13-64	21.1	16.9	5000
						6-17-64	21.4	16.6	5000

TABLE C-2 (Continued)

GROUND WATER LEVEL MEASUREMENTS

STATE WELL NUMBER	WELL USE	WELL DEPTH IN FEET	PERIOD OF RECORD		GROUND SURFACE ELEVATION IN FEET	DATE	GROUND TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
			BEGIN	END					
BUTTE VALLEY 1-03.00									
46N/01E-06N01 M	2	200	52		4242.4	7-12-63	22.9	4219.5	5000
						8-21-63	29.5	4212.9	5000
						9-20-63	24.3	4218.1	5000
						10-25-63	22.4	4220.0	5000
						11-22-63	21.4	4221.0	5000
						12-16-63	20.9	4221.5	5000
						1-17-64	20.5	4221.9	5000
						2-27-64	20.1	4222.3	5000
						3-19-64	19.8	4222.6	5000
						4-16-64	19.8	4222.6	5000
						5-14-64	27.1	4215.3	5000
						6-18-64	21.3	4221.1	5000
46N/02W-25R02 M	2	116	52		4256.2	7-12-63	(1)		5000
						8-21-63	(1)		5000
						9-20-63	31.5	4224.7	5000
						10-25-63	27.2	4229.0	5000
						11-22-63	26.0	4230.2	5000
						12-16-63	26.0	4230.2	5000
						1-17-64	25.6	4230.6	5000
						2-27-64	25.9	4230.3	5000
						3-19-64	26.1	4230.1	5000
						4-16-64	26.2	4230.0	5000
						5-14-64	31.3	4224.9	5000
						6-18-64	29.3	4226.9	5000
47N/01W-14B01 M	8	50	51		4233.7	7-12-63	11.9	4221.8	5000
						8-21-63	12.1	4221.6	5000
						9-20-63	12.2	4221.5	5000
						10-25-63	12.3	4221.4	5000
						11-22-63	12.4	4221.3	5000
						12-16-63	12.5	4221.2	5000
						1-17-64	13.4	4220.3	5000
						2-27-64	12.3	4221.4	5000
						3-19-64	12.2	4221.5	5000
						4-16-64	12.3	4221.4	5000
						5-14-64	12.3	4221.4	5000
						6-18-64	12.2	4221.5	5000
47N/01W-27B01 M	8	40	51		4233.4	7-12-63	10.1	4223.3	5000
						8-21-63	10.5	4222.9	5000
						9-20-63	10.8	4222.6	5000
						10-25-63	11.0	4222.4	5000
						11-22-63	11.0	4222.4	5000
						12-16-63	11.1	4222.3	5000
						1-17-64	11.0	4222.4	5000
						2-27-64	10.0	4223.4	5000
						3-19-64	10.5	4222.9	5000
						4-16-64	10.6	4222.8	5000
						5-14-64	10.6	4222.8	5000
						6-18-64	10.2	4223.2	5000

TABLE C-2 (Continued)

GROUND WATER LEVEL MEASUREMENTS

STATE WELL NUMBER	WELL USE	WELL DEPTH IN FEET	PERIOD OF RECORD		GROUND SURFACE ELEVATION IN FEET	DATE	GROUND TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYIN DATA
			BEGIN	END					
BUTTE VALLEY 1-03.00									
48N/01W-26N01 M	0	375	53		4244.2	7-12-63	18.7	4225.5	5000
						8-21-63	20.1	4224.1	5000
						9-20-63	20.5	4223.7	5000
						10-25-63	19.5	4224.7	5000
						11-22-63	19.0	4225.2	5000
						12-16-63	19.1	4225.1	5000
						1-17-64	18.9	4225.3	5000
						2-27-64	18.3	4225.9	5000
						3-19-64	16.3	4227.9	5000
						4-16-64	16.0	4228.2	5000
						5-14-64	16.4	4227.8	5000
						6-18-64	17.3	4226.9	5000
SHASTA VALLEY 1-04.00									
42N/05W-20J01 M	1	40	53		2882.0	7-12-63	5.8	2876.2	5000
						8-21-63	5.4	2876.6	5000
						9-20-63	4.2	2877.8	5000
						10-25-63	5.8	2876.2	5000
						11-22-63	5.8	2876.2	5000
						12-16-63	5.7	2876.3	5000
						1-17-64	7.1	2874.9	5000
						2-27-64	6.2	2875.8	5000
						3-19-64	6.3	2875.7	5000
						4-16-64	3.7	2878.3	5000
						5-14-64	5.1	2876.9	5000
						6-18-64	4.6	2877.4	5000
42N/06W-10J01 M	1	110	53		2835.0	7-12-63	5.8	2829.2	5000
						8-21-63	8.4	2826.6	5000
						9-20-63	10.3	2824.7	5000
						10-25-63	9.4	2825.6	5000
						11-22-63	8.3	2826.7	5000
						12-16-63	8.7	2826.3	5000
						1-17-64	9.2	2825.8	5000
						2-27-64	8.0	2827.0	5000
						3-19-64	6.0	2829.0	5000
						4-16-64	3.1	2831.9	5000
						5-14-64	4.5	2830.5	5000
						6-18-64	4.5	2830.5	5000
43N/06W-22A01 M	1	100	52		2665.0	7-12-63	(2) 17.1	2647.9	5000
						8-21-63	(2) 27.9	2637.1	5000
						9-20-63	(1)		5000
						10-25-63	6.3	2658.7	5000
						11-22-63	4.8	2660.2	5000
						12-16-63	4.1	2660.9	5000
						1-17-64	3.1	2661.9	5000
						2-27-64	3.3	2661.7	5000
						3-19-64	2.8	2662.2	5000
						4-16-64	(1)		5000
						5-14-64	(1)		5000
						6-18-64	(1)		5000

TABLE C-2 (Continued)

GROUND WATER LEVEL MEASUREMENTS

TE WELL NUMBER	WELL USE	WELL DEPTH IN FEET	PERIOD OF RECORD		GROUND SURFACE ELEVATION IN FEET	DATE	GROUND TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
			BEGIN	END					
ASTA VALLEY 1-04.00									
N/05W-34H01 M	2	96	52		2637.0	7-12-63	26.5	2610.5	5000
						8-21-63	(1)		5000
						9-20-63	24.2	2612.8	5000
						10-25-63	25.2	2611.8	5000
						11-21-63	26.9	2610.1	5000
						12-16-63	27.9	2609.1	5000
						1-17-64	26.9	2610.1	5000
						2-27-64	28.0	2609.0	5000
						3-19-64	29.0	2608.0	5000
						4-16-64	(1)		5000
						5-14-64	28.4	2608.6	5000
						6-18-64	26.4	2610.6	5000
N/05W-29B01 M	1	23	53		2635.0	7-12-63	(1)		5000
						8-21-63	17.8	2617.2	5000
						9-20-63	17.9	2617.1	5000
						10-25-63	16.8	2618.2	5000
						11-21-63	17.3	2617.7	5000
						12-16-63	18.3	2616.7	5000
						1-17-64	19.3	2615.7	5000
						2-27-64	20.4	2614.6	5000
						3-19-64	21.1	2613.9	5000
						4-16-64	(1)		5000
						5-14-64	20.5	2614.5	5000
						6-18-64	18.8	2616.2	5000
N/06W-19E01 M	1	425	53		2538.0	7-12-63	16.9	2521.1	5000
						8-21-63	18.1	2519.9	5000
						9-20-63	22.1	2515.9	5000
						10-25-63	17.2	2520.8	5000
						11-21-63	19.8	2518.2	5000
						12-16-63	19.4	2518.6	5000
						1-17-64	19.5	2518.5	5000
						2-27-64	19.0	2519.0	5000
						3-19-64	18.5	2519.5	5000
						4-16-64	18.9	2519.1	5000
						5-14-64	18.6	2519.4	5000
						6-18-64	18.8	2519.2	5000
OTT RIVER VALLEY 1-05.00									
N/09W-08C03 M	1	66	60		2836.0	7-12-63	33.8	2802.2	5000
						8-21-63	40.5	2795.5	5000
						9-20-63	45.6	2790.4	5000
						10-25-63	50.4	2785.6	5000
						11-21-63	(1)		5000
						12-17-63	51.7	2784.3	5000
						1-17-64	50.4	2785.6	5000
						2-27-64	38.7	2797.3	5000
						3-19-64	34.8	2801.2	5000
						4-16-64	35.6	2800.4	5000
						5-14-64	39.3	2796.7	5000
						6-18-64	34.2	2801.8	5000

TABLE C-2 (Continued)

GROUND WATER LEVEL MEASUREMENTS

STATE WELL NUMBER	WELL USE	WELL DEPTH IN FEET	PERIOD OF RECORD		GROUND SURFACE ELEVATION IN FEET	DATE	GROUND TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYIN DATA
			BEGIN	END					
SCOTT RIVER VALLEY 1-05.00									
42N/09W-27N01 M	0	19	53		2930.0	7-12-63	3.1	2926.9	5000
						8-21-63	6.9	2923.1	5000
						9-20-63	8.0	2922.0	5000
						10-25-63	6.3	2923.7	5000
						11-22-63	4.1	2925.9	5000
						12-17-63	4.6	2925.4	5000
						1-17-64	2.2	2927.8	5000
						2-27-64	3.2	2926.8	5000
						3-19-64	3.9	2926.1	5000
						4-16-64	2.4	2927.6	5000
						5-14-64	1.1	2928.9	5000
						6-18-64	1.6	2928.4	5000
43N/09W-24F01 M	2	205	53		2735.0	7-12-63	4.4	2730.6	5000
						8-21-63	(1)		5000
						9-20-63	(1)		5000
						10-25-63	10.8	2724.2	5000
						11-22-63	10.2	2724.8	5000
						12-17-63	10.5	2724.5	5000
						1-17-64	11.0	2724.0	5000
						2-27-64	10.6	2724.4	5000
						3-19-64	10.6	2724.4	5000
						4-16-64	8.5	2726.5	5000
						5-14-64	4.2	2730.8	5000
						6-18-64	4.8	2730.2	5000
44N/09W-28P01 M	0	65	53		2711.0	7-12-63	(7)		5000
						8-21-63	11.9	2699.1	5000
						9-20-63	9.9	2701.1	5000
						10-25-63	(7)		5000
						11-22-63	25.0	2686.0	5000
						12-17-63	21.3	2689.7	5000
						1-17-64	23.2	2687.8	5000
						2-27-64	9.0	2702.0	5000
						3-19-64	9.5	2701.5	5000
						4-16-64	3.8	2707.2	5000
						5-14-64	3.8	2707.2	5000
						6-18-64	9.8	2701.2	5000
MAD RIVER VALLEY 1-08.00									
06N/01E-06H01 H	3	27	51		151.0	7-11-63	8.9	142.1	5000
						8-20-63	11.8	139.2	5000
						9-19-63	14.0	137.0	5000
						10-24-63	11.1	139.9	5000
						11-21-63	2.2	148.8	5000
						12-18-63	3.7	147.3	5000
						1-16-64	1.0	150.0	5000
						2-26-64	3.3	147.7	5000
						3-18-64	2.1	148.9	5000
						4-15-64	4.2	146.8	5000
						5-13-64	6.2	144.8	5000
						6-17-64	8.8	142.2	5000

TABLE C-2 (Continued)

GROUND WATER LEVEL MEASUREMENTS

ATE WELL NUMBER	WELL USE	WELL DEPTH IN FEET	PERIOD OF RECORD BEGIN	PERIOD OF RECORD END	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
AD RIVER VALLEY 1-08.00									
6N/01E-29P01 H	4	46	52		25.0	7-11-63	11.7	13.3	5000
						8-20-63	13.7	11.3	5000
						9-19-63	14.0	11.0	5000
						10-24-63	11.6	13.4	5000
						11-20-63	8.9	16.1	5000
						12-18-63	8.4	16.6	5000
						1-16-64	7.6	17.4	5000
						2-26-64	7.5	17.5	5000
						3-18-64	7.0	18.0	5000
						4-15-64	7.5	17.5	5000
						5-13-64	8.0	17.0	5000
						6-17-64	9.1	15.9	5000
EL RIVER VALLEY 1-10.00									
3N/01W-18D01 H	1	24	51		24.0	7-10-63	1.7	22.3	5000
						8-20-63	2.1	21.9	5000
						9-19-63	2.2	21.8	5000
						10-24-63	2.3	21.7	5000
						11-20-63	2.5	21.5	5000
						12-18-63	2.7	21.3	5000
						1-16-64	2.4	21.6	5000
						2-26-64	1.6	22.4	5000
						3-18-64	1.6	22.4	5000
						4-15-64	1.5	22.5	5000
						5-13-64	1.6	22.4	5000
						6-17-64	1.9	22.1	5000
3N/01W-34J01 H	0	496	51		60.0	7-10-63	(7)		5000
						8-21-63	34.5	25.5	5000
						9-19-63	35.0	25.0	5000
						10-23-63	34.9	25.1	5000
						11-20-63	32.9	27.1	5000
						12-18-63	33.2	26.8	5000
						1-16-64	32.8	27.2	5000
						2-26-64	32.2	27.8	5000
						3-18-64	32.1	27.9	5000
						4-15-64	32.6	27.4	5000
						5-13-64	33.2	26.8	5000
						6-17-64	33.9	26.1	5000
3N/02W-26R01 H	2	30	51		20.0	7-10-63	8.1	11.9	5000
						8-20-63	9.2	10.8	5000
						9-19-63	9.2	10.8	5000
						10-24-63	8.5	11.5	5000
						11-20-63	6.7	13.3	5000
						12-18-63	6.7	13.3	5000
						1-16-64	8.1	11.9	5000
						2-26-64	8.0	12.0	5000
						3-18-64	5.0	15.0	5000
						4-15-64	6.1	13.9	5000
						5-13-64	6.9	13.1	5000
						6-17-64	8.0	12.0	5000

TABLE C-2 (Continued)

GROUND WATER LEVEL MEASUREMENTS

STATE WELL NUMBER	WELL USE	WELL DEPTH IN FEET	PERIOD OF RECORD		GROUND SURFACE ELEVATION IN FEET	DATE	GROUND TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYI DATA
			BEGIN	END					
ROUND VALLEY 1-11.00									
22N/12W-04B01 M	2	200	51		1351.0	7-10-63	8.2	1342.8	5000
						8-19-63	10.9	1340.1	5000
						9-05-63	11.9	1339.1	5001
						10-09-63	14.8	1336.2	5001
						11-14-63	10.0	1341.0	5001
						12-17-63	6.6	1344.4	5001
						1-24-64	4.4	1346.6	5001
						2-26-64	6.2	1344.8	5001
						3-17-64	(7)		5001
						4-10-64	6.7	1344.3	5001
						5-07-64	7.1	1343.9	5001
						6-09-64	7.6	1343.4	5001
22N/12W-06L03 M	0	660	60		1369.7	7-31-63	5.2	1364.5	5001
						9-05-63	7.7	1362.0	5001
						10-09-63	2.5	1367.2	5001
						11-14-63	-3.6	1373.3	5001
						12-18-63	-6.8	1376.5	5001
						1-24-64	FLOW		5001
						2-26-64	FLOW		5001
						4-09-64	FLOW		5001
						5-07-64	FLOW		5001
						6-09-64	-6.8	1376.5	5001
22N/13W-12R01 M	9	321	61		1400.0	7-10-63	11.2	1388.8	5001
						8-19-63	17.1	1382.9	5001
						9-05-63	20.1	1379.9	5001
						10-09-63	24.3	1375.7	5001
						11-14-63	10.9	1389.1	5001
						12-18-63	16.6	1383.4	5001
						1-24-64	9.2	1390.8	5001
						2-26-64	6.8	1393.2	5001
						3-17-64	(7)		5001
						4-10-64	7.8	1392.2	5001
						5-07-64	9.3	1390.7	5001
						6-09-64	12.4	1387.6	5001
23N/12W-31N01 M	2	200	51		1388.5	7-10-63	FLOW		5000
						8-19-63	0.7	1387.8	5000
						9-05-63	1.5	1387.0	5001
						10-09-63	(1)		5001
						11-13-63	2.0	1386.5	5001
						12-18-63	FLOW		5001
						1-24-64	FLOW		5001
						2-26-64	FLOW		5001
						3-17-64	(7)		5001
						4-10-64	FLOW		5001
						5-07-64	FLOW		5001
						6-09-64	FLOW		5001

TABLE C-2 (Continued)

GROUND WATER LEVEL MEASUREMENTS

TE WELL NUMBER	WELL USE	WELL DEPTH IN FEET	PERIOD OF RECORD		GROUND SURFACE ELEVATION IN FEET	DATE	GROUND TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
			BEGIN	END					
UND VALLEY 1-11.00									
N/13W-36C03 M	9	289	61		1409.5	7-10-63	13.3	1396.2	5001
						8-19-63	19.1	1390.4	5001
						9-05-63	21.9	1387.6	5001
						10-09-63	25.6	1383.9	5001
						11-13-63	18.0	1391.5	5001
						12-18-63	12.7	1396.8	5001
						1-23-64	7.0	1402.5	5001
						2-25-64	8.8	1400.7	5001
						3-17-64	(7)		5001
						4-09-64	9.5	1400.0	5001
						5-07-64	10.4	1399.1	5001
						6-09-64	12.8	1396.7	5001
N/13W-36Q01 M	9	300	61		1403.0	7-10-63	6.4	1396.6	5001
						8-19-63	11.5	1392.5	5001
						9-05-63	13.8	1389.2	5001
						10-09-63	16.6	1386.4	5001
						11-13-63	13.6	1389.4	5001
						12-18-63	6.5	1396.5	5001
						1-24-64	0.2	1402.8	5001
						2-25-64	1.3	1401.7	5001
						3-17-64	(7)		5001
						4-09-64	2.4	1400.6	5001
						5-07-64	3.8	1399.2	5001
						6-09-64	6.0	1397.0	5001
YTONVILLE VALLEY 1-12.00									
N/14W-30M01 M	7	23	52		1688.0	7-10-63	13.2	1674.8	5000
						8-19-63	15.8	1672.2	5000
						9-18-63	15.9	1672.1	5000
						10-23-63	16.1	1671.9	5000
						11-20-63	7.9	1680.1	5000
						12-18-63	5.8	1682.2	5000
						1-15-64	5.2	1682.8	5000
						2-25-64	6.9	1681.1	5000
						3-17-64	5.3	1682.7	5000
						4-15-64	5.9	1682.1	5000
						5-13-64	8.2	1679.8	5000
						6-16-64	14.5	1673.5	5000
N/15W-12M02 M	1	50	62		1545.0	7-10-63	12.9	1532.1	5000
						8-19-63	15.1	1529.9	5000
						9-18-63	16.3	1528.7	5000
						10-23-63	17.2	1527.8	5000
						11-20-63	12.3	1532.7	5000
						12-18-63	12.1	1532.9	5000
						1-15-64	8.3	1543.6	5000
						2-25-64	7.9	1537.1	5000
						3-17-64	5.7	1539.3	5000
						4-15-64	9.3	1535.7	5000
						5-13-64	12.2	1532.8	5000
						6-16-64	(1)		5000

TABLE C-2 (Continued)

GROUND WATER LEVEL MEASUREMENTS

STATE WELL NUMBER	WELL USE	WELL DEPTH IN FEET	PERIOD OF RECORD BEGIN	PERIOD OF RECORD END	GROUND SURFACE ELEVATION IN FEET	DATE		GROUND TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYIN DATA
LAYTONVILLE VALLEY 1-12.00										
21N/15W-24A01 M	0	22	52		1653.0	7-10-63		4.7	1648.3	5000
						8-19-63		7.3	1645.7	5000
						9-18-63		7.9	1645.1	5000
						10-23-63		8.5	1644.5	5000
						11-20-63		0.8	1652.2	5000
						12-18-63		2.9	1650.1	5000
						1-15-64		1.4	1651.6	5000
						2-25-64		2.6	1650.4	5000
						3-17-64		1.6	1651.4	5000
						4-15-64		2.8	1650.2	5000
						5-13-64		3.0	1650.0	5000
						6-16-64		4.0	1649.0	5000
LITTLE LAKE VALLEY 1-13.00										
18N/13W-08L01 M	1	19	53		1340.0	7-10-63		4.3	1335.7	5000
						8-19-63	(1)	5.8	1334.2	5000
						9-18-63		(1)		5000
						10-23-63		(1)		5000
						11-20-63		0.3	1339.7	5000
						12-18-63		0.6	1339.4	5000
						1-15-64		0.2	1339.8	5000
						2-25-64		1.2	1338.8	5000
						3-17-64		0.4	1339.6	5000
						4-14-64		2.1	1337.9	5000
						5-12-64		2.7	1337.3	5000
						6-16-64		4.0	1336.0	5000
18N/13W-17J01 M	1	40	58		1350.0	7-10-63		10.0	1340.0	5000
						8-19-63		13.0	1337.0	5000
						9-18-63		14.0	1336.0	5000
						10-23-63		14.7	1335.3	5000
						11-20-63		12.8	1337.2	5000
						12-18-63		11.0	1339.0	5000
						1-15-64		9.0	1341.0	5000
						2-25-64		6.4	1343.6	5000
						3-17-64		5.9	1344.1	5000
						4-14-64		6.4	1343.6	5000
						5-12-64		7.2	1342.8	5000
						6-16-64		8.9	1341.1	5000
18N/13W-18E01 M	0	493	58		1350.0	7-10-63		21.8	1328.2	5000
						8-19-63		25.4	1324.6	5000
						9-18-63		27.4	1322.6	5000
						10-23-63		25.7	1324.3	5000
						11-20-63		26.0	1324.0	5000
						12-18-63		21.1	1328.9	5000
						1-15-64		21.5	1328.5	5000
						2-25-64		21.2	1328.8	5000
						3-17-64		20.9	1329.1	5000
						4-14-64		22.2	1327.8	5000
						5-12-64		22.8	1327.2	5000
						6-16-64		24.3	1325.7	5000

APPENDIX D

SURFACE WATER QUALITY

SURFACE WATER QUALITY

The Surface Water Quality Data Program provides basic information on the quality characteristics of the State's surface waters. Data presented in this appendix are measured values of the chemical, physical, and radiological characteristics of surface waters in the North Coastal Area, as shown on the "Area Orientation Map". The surface water quality program is performed in cooperation with other state, local, and federal agencies.

All data presented in this volume are within the North Coastal Water Pollution Control Region (No. 1) excluding the Russian River drainage basin and the area along the coast south of the Mattole River drainage. Figure B-1 in Appendix B shows the location of surface water sampling stations for the 1963-64 water year. Surface water quality samples are normally collected at or near existing stream gaging stations.

The Surface Water Quality Data Program consists of selecting locations to be sampled, collection of samples by Department personnel or cooperators, laboratory analysis by an assigned agency, examination of the data to note trends or significant changes, and publication of the data and findings.

Except where noted, tabulated values for temperature and dissolved oxygen are those measured in the field at the time of sampling. Comments on local conditions are noted in the field books but are not included in the tabulation.

Tabulated values for dissolved minerals are the analytical quantity reported in parts per million (ppm) and a computed value for equivalents per million (epm). Electrical conductivity is reported as micromhos at 25° C and temperature is in degrees Fahrenheit. Laboratory analyses of surface water

samples were performed by the U. S. Geological Survey (USGS) in accordance with "Methods for Collection and Analysis of Water Samples", Water-Supply Paper 1454. Analysis of surface water samples for trace elements was performed by spectrograph by the U. S. Geological Survey and is reported in parts per billion.

Analyses for radioactivity were made by the California Department of Public Health in Berkeley, and the results are expressed in terms of activity measured in micro-micro curies per liter (mmc/l), which is equivalent to pico-curies per liter (pc/l). The most probable error is reported with the measured value.

Bacteriologic determinations were also made by the California Department of Public Health in Berkeley, and are expressed as the most probable number (MPN) of coliform bacteria per milliliter of sample. In view of the rapidity and frequency of change in the density of coliform organisms, frequent and lengthy sampling is necessary before a truly reliable evaluation can be made.

TABLE D-1

SAMPLING STATION DATA AND INDEX

NORTH COASTAL AREA

Station	Station Number	Location[a]	Period[b] of Record	Frequency[c] of Sampling	Sampled[d] by	Analyses on page
Antelope Creek near Tennant	1e	43N/1W-25	MAR 59	M	DWR	
Bear River near Capetown	7b	01N/03W-13 *	MAY 64	M	DWR	
Butte Creek near Macdoel	1d	45N/1W-30	MAR 59	M	DWR	
Eel River near Dos Rios	5d	21N/13W-31	APR 58	M	DWR	
Eel River near McCann	5	02S/03E-04 *	APR 51	M	DWR	
Eel River, Middle Fork at Dos Rios	5c	21N/13W-06	APR 58	M	DWR	
Eel River at Scotia	6	02N/01E-31 *	APR 51	M	DWR	
Eel River, South Fork near Miranda	7	03S/04E-30 *	APR 51	M	DWR	
Klamath River above Hamburg Reservoir Site	1c	46N/10W-14	DEC 58	M	DWR	
Klamath River below Iron Gate Dam	1f	47N/05W-17	DEC 61	M	DWR	
Klamath River near Klamath	3	13N/01E-24 *	APR 51	M	DWR	
Klamath River at Orleans	2c	11N/06E-31 *	JAN 64	M	DWR	
Klamath River near Seiad Valley	2b	46N/12W-03	DEC 58	M	DWR	
Mad River near Arcata	6a	06N/01E-15 *	NOV 58	M	DWR	
Mattole River near Petrolia	7a	02S/02W-11 *	JAN 59	M	DWR	
Outlet Creek near Longvale	5b	20N/14W-01	MAY 58	M	DWR	
Redwood Creek at Orick	3b	10N/01E-04 *	NOV 58	M	DWR	
Salmon River at Someshar	2a	11N/06E-02 *	NOV 58	S	DWR	
Scott River near Fort Jones	1b	44N/10W-29	DEC 58	M	DWR	
Shasta River near Yreka	1a	46N/07W-24	DEC 58	M	DWR	
Smith River near Crescent City	3a	16N/01E-10 *	APR 51	M	DWR	
Trinity River near Burnt Ranch	4b	05N/07E-19 *	APR 58	M	DWR	
Trinity River near Hoopa	4	08N/05E-31 *	APR 51	M	DWR	
Trinity River at Lewiston	4a	33N/08W-17	APR 51	M	DWR	
Van Duzen River near Bridgeville	5a	01N/03E-17 *	APR 58	M	DWR	

Except as indicated below location is referenced to Mt. Diablo Base and Meridian
*Humboldt Base and Meridian
Beginning of record
M-Monthly, B-Bimonthly, Q-Quarterly, S-Semiannually
California Department of Water Resources (DWR)

TABLE D-2

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

ANTELOPE CREEK NEAR TENNANT (STA. 1e)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
10-8-63 1040	19	47	10.5	107	60	7.4 / 7.4	0.46		3.2 / 0.14		0 / 0.00	35 / 0.57		0.5 / 0.01			0.0			23	23	0	1			
11-5 1240	31	39	10.7	98	56	7.3 / 7.5	0.42		2.6 / 0.11		0 / 0.00	32 / 0.52		0.6 / 0.02			0.1			21	21	0	3			
12-3 1200	26	35	12.0	104	57	7.2 / 7.7	0.42		2.6 / 0.11		0 / 0.00	34 / 0.56		0.5 / 0.01			0.0			21	21	0	1			
Discontinued																										

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

BEAR RIVER NEAR CAPETOWN (STA. 7b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micrombos at 25°C)	pH a/b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents d	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform h MPN/ml	Analyzed by i
							equivalents per million																			
5/12/64 0820	20 est.	54	10.8	100	212	7.7 / 8.1	28 / 1.40	4.4 / 0.36	7.7 / 0.33	1.0 / 0.03	0 / 0.00	90 / 1.48	23 / 0.48	5.0 / 0.14	2.0 / 0.03	0.3 / 0.02	0.1	10	ABS 0.0 As 0.01 PO_4 0.05	126 f	16	88	14	1		USGS
6/3 0820	20 est.	58	10.2	99	243	7.9 / 8.3	— / 2.10 c		9.0 / 0.39		2 / 0.07	106 / 1.74		5.0 / 0.14			0.1				16	105	15	1		
7/14 0740	15 est.	64	9.2	96	270	8.0 / 8.4	— / 2.40 c		9.5 / 0.41		5 / 0.17	118 / 1.93		6.0 / 0.17			0.1				15	120	15	1		
8/11 0900	10 est.	66	9.3	99	293	8.0 / 8.4	— / 2.64 c		10 / 0.44		4 / 0.13	133 / 2.18		5.5 / 0.16			0.2				14	132	16	1		
9/15 0825	7 est.	57	9.9	95	315	7.9 / 8.4	48 / 2.40	4.9 / 0.40	10 / 0.44	1.3 / 0.03	4 / 0.13	140 / 2.29	32 / 0.67	7.0 / 0.20	0.4 / 0.01		0.4	7.4	ABS 0.0 As 0.00 PO_4 0.05	195 f	13	140	19	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectragraphic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

BUTTE CREEK NEAR MACDOEL (STA. 1d)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million												Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents								
																					Total ppm	N.C. ppm			
10-8-63 1200	4 est.	51	10.1	105	76	7.4 / 7.6	— / 0.56		3.9 / 0.17		0 / 0.00	44 / 0.72		0.5 / 0.01			0.6					0			
11-5 1335	10 est.	43	10.4	98	72	7.3 / 7.8	— / 0.54		3.5 / 0.15		0 / 0.00	42 / 0.69		0.7 / 0.02			0.1				27	0			
12-3 1305	10 est.	34	12.3	101	69	7.2 / 7.8	— / 0.50		3.3 / 0.14		0 / 0.00	40 / 0.66		0.5 / 0.01			0.0				25	0			
Discontinued																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water".

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood

TABLE 3 (CONTINUED)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

EEL RIVER NEAR DOS RIOS (STA. 5d)

Mineral constituents in parts per million (equivalents per million)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
10/8/63 1500	22	63	10.1	107	246	8.3/8.3	2.08[c]		10/0.44		3/0.10	114/1.87		6.8/0.19			0.5				17	104	6	2		USGS
11/14 1300	1100	54	10.0	96	148	7.6/7.6	1.28[c]		4.2/0.18		0/0.00	74/1.21		2.6/0.07			0.1				12	64	3	700		
12/12 1350	155	43	12.6	104	185	7.6/8.0	1.62[c]		5.8/0.25		0/0.00	92/1.51		3.5/0.10			0.2				13	81	6	4		
1/7/64 1620	108	44	12.0	101	205	7.5/8.0	1.80[c]		8.1/0.35		0/0.00	106/1.74		4.3/0.12			0.2				16	90	3	2		
2/4 1500	931	47	12.4	108	144	7.3/7.9	1.24[c]		5.0/0.22		0/0.00	75/1.23		2.0/0.06			0.2				15	62	0	30		
3/11 0940	132	47	11.0	96	205	8.4/8.4	1.82[c]		6.8/0.30		2/0.07	104/1.70		4.0/0.11			0.3				14	91	2	2		
4/14 1430	1074	67	9.8	109	199	8.1/8.4	1.84[c]		5.9/0.26		2/0.07	102/1.67		5.2/0.15			0.2				12	92	5	2		
5/11 1500	612	74	9.7	115	225	8.4/8.1	27/1.35	7.9/0.65	7.4/0.32	1.0/0.03	0/0.00	116/1.90	14/0.29	2.5/0.07	3.4/0.05	0.3/0.02	0.2	7.3	ABS 0.0 As 0.00 PO_4 0.00	129[f]	14	100	5	1		
6/2 1545	20	74	10.1	121	241	8.4/8.5	2.20[c]		9.3/0.40		5/0.17	118/1.93		4.0/0.11			0.3				15	110	5	1		
7/14 1820	7.2	83	9.5	125	252	8.4/8.5	2.22[c]		10/0.44		6/0.20	119/1.95		5.5/0.16			0.4				17	111	4	2		
8/10 1645	0.5	83	9.4	123	247	8.4/8.5	2.00[c]		12/0.52		4/0.13	112/1.84		6.0/0.17			0.6				20	103	5	1		
9/1 1445	1.0	72	8.6	101	255	8.4/7.8	27/1.35	8.6/0.71	12/0.52	0.9/0.02	0/0.00	113/1.85	24/0.50	9.5/0.27	0.2/0.00		0.6	6.8	ABS 0.1 As 0.00 PO_4 0.00	145[f]	20	103	10	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

EEL RIVER NEAR McCANN (STA. 5)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/ b/	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents d/	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform h/ MPN/ml	Analyzed by i/
10/2/63 1120	-	69	9.2	102	284	8.0 / 8.4	— / 2.62 c/		8.0 / 0.35		8 / 0.27	129 / 2.11		6.5 / 0.18			0.2				12	131	12	1	Median 3.6	USGS
11/13 1145	-	55	10.1	*	164	7.6 / 8.0	— / 1.46 c/		4.2 / 0.18		0 / 0.00	79 / 1.29		3.2 / 0.09			0.0				11	73	8	20	Maximum 62.	
12/11 1150	-	45	11.6	97	175	7.4 / 8.0	— / 1.58 c/		4.4 / 0.19		0 / 0.00	88 / 1.44		2.3 / 0.07			0.1				11	79	7	15	Minimum 0.06	
1/14/64 1150	-	44	12.3	101	163	7.3 / 8.3	— / 1.28 c/		4.2 / 0.18		2 / 0.07	76 / 1.25		3.2 / 0.09			0.2				12	64	0	100		
2/11 1200	-	46	12.5	106	158	7.6 / 8.3	— / 1.42 c/		4.7 / 0.20		2 / 0.07	78 / 1.28		2.0 / 0.06			0.1				12	71	4	15		
3/10 1110	-	49	11.1	98	186	7.6 / 8.5	— / 1.70 c/		5.2 / 0.23		2 / 0.07	91 / 1.49		2.5 / 0.07			0.2				12	85	7	3		
4/14 1220	-	60	10.1	102	173	7.8 / 8.3	— / 1.62 c/		4.9 / 0.21		2 / 0.07	85 / 1.39		4.0 / 0.11			0.1				11	81	8	5		
5/12 1145	-	65	9.5	101	195	8.2 / 8.2	26 / 1.30	6.1 / 0.50	5.3 / 0.23	0.8 / 0.02	0 / 0.00	100 / 1.64	13 / 0.27	2.5 / 0.07	2.0 / 0.03	0.2 / 0.01	0.1	8.0	ABS 0.0 As 0.00 PO_4 0.05	113 f/	11	90	8	1		
6/3 1210	-	70	9.4	106	209	8.2 / 8.4	— / 1.94 c/		6.1 / 0.27		2 / 0.07	106 / 1.74		2.5 / 0.07			0.2				12	97	7	2		
7/14 1310	-	74	8.6	101	256	8.2 / 8.4	— / 2.40 c/		8.1 / 0.35		5 / 0.17	127 / 2.08		5.0 / 0.14			0.1				13	120	8	1		
8/11 1200	-	70	9.2	103	259	8.2 / 8.4	— / 2.40 c/		7.6 / 0.33		4 / 0.13	114 / 1.87		4.5 / 0.13			0.2				12	120	20	3		
9/15 1200	-	68	9.9	109	275	8.2 / 8.2	35 / 1.75	9.4 / 0.77	8.2 / 0.36	1.2 / 0.03	0 / 0.00	137 / 2.25	21 / 0.44	5.5 / 0.16	0.8 / 0.01		0.2	9.6	ABS 0.0 As 0.00 PO_4 0.00	153 f/	12	126	14	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood

EEL RIVER AT SCOTIA (STA. 6)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million												Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
			ppm	%Sat		a / b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]			Total ppm	N.C. ppm			
10/2/63 1345	124	70	13.8	154	291	8.4 / 8.5	2.72[c]		9.0 / 0.39		10 / 0.33	142 / 2.33		7.8 / 0.22			0.2				13	136	3	2	Median 2.3	USGS
11/13 1430	4350	55	10.1	95	156	7.6 / 8.1	1.38[c]		5.0 / 0.22		0 / 0.00	79 / 1.29		4.8 / 0.14			0.1				14	69	4	25	Maximum 62.	
12/11 1440	4190	47	11.5	98	176	7.6 / 8.2	1.56[c]		5.5 / 0.24		0 / 0.00	90 / 1.48		4.0 / 0.11			0.0				13	78	4	10	Minimum 0.06	
1/14/64 1415	4870	47	12.2	104	159	7.6 / 8.3	1.36[c]		5.5 / 0.24		1 / 0.03	66 / 1.08		4.5 / 0.13			0.1				15	68	12	40		
2/11 1430	4890	50	11.6	102	162	7.7 / 8.2	1.44[c]		5.5 / 0.24		0 / 0.00	84 / 1.38		2.8 / 0.08			0.1				14	72	3	10		
3/10 1330	2420	52	12.2	110	183	7.9 / 8.4	1.60[c]		6.5 / 0.28		1 / 0.03	91 / 1.49		2.5 / 0.07			0.1				15	80	4	2		
4/14 1445	2690	61	10.1	102	177	8.0 / 8.3	1.66[c]		4.7 / 0.20		1 / 0.03	94 / 1.54		4.8 / 0.14			0.1				11	83	4	5		
5/12 1410	1350	65	10.0	105	208	8.2 / 8.4	23 / 1.15	8.9 / 0.73	6.6 / 0.29	0.9 / 0.02	2 / 0.07	107 / 1.75	15 / 0.31	3.5 / 0.10	1.9 / 0.03	0.2 / 0.01	0.1	11	ABS 0.0 As 0.00 PO_4 0.05		129[f]	13	94	3	1		
6/3 1420	694	69	11.0	121	227	8.3 / 8.5	2.08[c]		7.2 / 0.31		4 / 0.13	115 / 1.88		3.0 / 0.08			0.1				13	104	3	2		
7/14 1530	240	72	9.6	109	281	8.3 / 8.4	2.64[c]		9.2 / 0.40		7 / 0.23	141 / 2.31		5.0 / 0.14			0.1				13	132	5	1		
8/11 1430	120	72	11.5	131	279	8.4 / 8.6	2.58[c]		9.4 / 0.41		6 / 0.20	142 / 2.33		5.5 / 0.16			0.1				14	129	3	2		
9/15 1400	76	75	15.0	175	269	8.4 / 8.3	30 / 1.50	11 / 0.88	11 / 0.48	1.6 / 0.04	4 / 0.13	134 / 2.20	15 / 0.31	9.5 / 0.27	1.1 / 0.02		0.1	8.6	ABS 0.0 As 0.00 PO_4 0.05		150[f]	17	119	3	3		

o Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (No. 1)

KLAMATH RIVER ABOVE HAMBURG RESERVOIR SITE (STA. 1c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in ppm / equivalents per million												Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)				Total ppm	N.C. ppm			
10/9/63 1015	-	63	9.6	104	206	8.0 / 8.0	1.42[c]		16 / 0.70		0 / 0.00	112 / 1.84		6.2 / 0.17	1.4 / 0.02		0.1		PO_4 0.35		33	71	0	4		USGS
11/6 1155	-	53	10.4	100	267	7.8 / 8.0	1.65[c]		19 / 0.83		0 / 0.00	119 / 1.95		7.2 / 0.20	4.1 / 0.07		0.2		PO_4 0.60		33	83	0	5		
12/4 1140	-	43	11.9	101	281	7.7 / 7.6	1.66[c]		25 / 1.09		0 / 0.00	118 / 1.93		6.0 / 0.17	6.6 / 0.11		0.2		PO_4 0.50		40	83	0	4		
1/7/64 1200	-	41	11.9	98	188	7.6 / 8.3	1.24[c]		14 / 0.61		2 / 0.07	86 / 1.41		5.8 / 0.16	5.2 / 0.08		0.2		PO_4 0.35		33	62	0	5		
2/4 1145	-	39	12.9	103	221	7.7 / 8.3	1.56[c]		16 / 0.70		1 / 0.03	107 / 1.75		4.5 / 0.13	5.1 / 0.08		0.2		PO_4 0.45		41	78	0	10		
3/5 1130	-	43	12.3	104	266	7.6 / 8.2	1.84[c]		20 / 0.87		0 / 0.00	128 / 2.10		6.5 / 0.18	3.5 / 0.06		0.3		PO_4 0.25		32	92	0	4		
4/8 1025	-	49	11.1	102	318	7.6 / 8.2	2.24[c]		22 / 0.96		0 / 0.00	118 / 1.93		5.2 / 0.15	3.9 / 0.06		0.1		PO_4 0.25		30	112	15	8		
5/6 1025	-	51	11.3	106	228	8.4 / 7.9	18 / 0.90	9.0 / 0.74	16 / 0.70	2.1 / 0.05	0 / 0.00	115 / 1.88	15 / 0.31	6.0 / 0.17	2.3 / 0.04	0.5 / 0.03	0.0	14	ABS 0.0 As 0.00 PO_4 0.15	141[f]	29	82	0	10		
6/10 1025	-	59	9.6	100	284	8.2 / 8.3	2.02[c]		21 / 0.91		2 / 0.07	148 / 2.43		6.5 / 0.18	3.3 / 0.05		0.4		PO_4 0.45		31	101	0	7		
7/7 1035	-	72	9.0	107	245	8.3 / 8.2	1.62[c]		19 / 0.83		0 / 0.00	113 / 1.85		4.5 / 0.13	1.5 / 0.02		0.1		PO_4 0.35		34	81	0	8		
8/5 1030	-	72	9.2	111	325	8.4 / 8.0	1.96[c]		30 / 1.30		0 / 0.00	126 / 2.07		6.6 / 0.19	2.1 / 0.03		0.1		PO_4 0.35		40	98	0	4		
9/2 1030	-	64	9.1	100	245	8.0 / 7.6	18 / 0.90	7.8 / 0.64	19 / 0.83	3.0 / 0.08	0 / 0.00	109 / 1.79	24 / 0.50	5.7 / 0.16	2.4 / 0.04		0.0	25	ABS 0.1 As 0.01 PO_4 0.50	157[f]	34	77	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water".

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER BELOW IRON GATE DAM (STA. 1f)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/ b/	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
10/9/63 0840	1760	63	7.3	81	166	7.3 / 7.7	1.12[c]		13 / 0.57		0 / 0.00	86 / 1.41		4.2 / 0.12	1.7 / 0.03		0.1		PO_4 0.35		34	56	0	3	Median 23.	USGS
11/6 1010	1770	53	8.2	81	225	7.2 / 7.9	1.34[c]		14 / 0.83		0 / 0.00	94 / 1.54		4.6 / 0.13	4.7 / 0.08		0.0		PO_4 0.70		38	67	0	7	Maximum 620.	
12/4 0955	3010	44	10.3	90	266	7.4 / 8.3	1.40[c]		25 / 1.09		1 / 0.03	101 / 1.66		5.1 / 0.14	6.6 / 0.11		0.0		PO_4 0.45		43	73	0	2	Minimum 0.62	
1/7/64 1015	3120	40	11.5	[illegible]	151	7.3 / 8.1	0.90[c]		12 / 0.52		0 / 0.00	70 / 1.15		3.5 / 0.10	6.0 / 0.10		0.1		PO_4 0.35		37	45	0	5		
2/4 1010	2810	39	11.5	94	176	7.3 / 8.1	1.04[c]		16 / 0.70		0 / 0.00	77 / 1.26		2.5 / 0.07	7.0 / 0.11		0.2		PO_4 0.45		40	52	0	10		
3/5 1000	1400	40	11.9	99	213	7.4 / 7.5	1.30[c]		18 / 0.78		0 / 0.00	86 / 1.41		4.5 / 0.13	5.3 / 0.09		0.1		PO_4 0.25		38	65	0	3		
4/8 [illegible]	3080	49	10.2	[illegible]	313	[illegible] / [illegible]	[illegible]		23 / 1.00		0 / 0.00	108 / 1.77		6.0 / 0.17	4.2 / 0.07		0.1		PO_4 0.20		32	106	17	7		
[illegible] 0855	1030	53	12.	123	179	[illegible] / [illegible]	1.33 / 0.66	2.41 / 0.41	14 / 0.61	3.6 / 0.09	[illegible] / 0.00	72 / 1.18	19 / 0.40	5.0 / 0.14	1.2 / 0.02	0.2 / 0.01	0.1	12	ABS 0.0 As 0.00 PO_4 0.20	118[f]	34	56	0	5		
[illegible] 0840	[illegible]	5	[illegible]	102	184	7.[illegible] / [illegible]	1.22[c]		1[illegible] / 0.67		1 / .73	8[illegible] / 1.38		3.[illegible] / 0.08	4.[illegible] / 0.07		0.1		PO_4 0.22		36	61	0	3		
7/1 0840	[illegible]	[illegible]	10.	123	228	[illegible] / 8.3	1.43[c]		20 / 0.87		1 / 0.13	21 / 1.49		[illegible].0 / 0.11	1.5 / 0.02		0.1		PO_4 0.25		38	70	0	3		
[illegible] [illegible]	[illegible]	[illegible]	[illegible].2	109	319	[illegible] / 8.2	1.88		30 / 1.30		0 / 0.00	117 / 1.92		5.7 / 0.16	2.6 / 0.04		0.1		PO_4 0.55		41	94	0	4		
[illegible] [illegible]	1360	[illegible]	[illegible].[illegible]	82	8[illegible]	8.6 / 7.9	1.[illegible] / 0.75	8.4 / 0.69	18 / 0.78	4.2 / 0.08	0 / 0.00	102 / 1.67	21 / 0.44	4.7 / 0.13	1.8 / 0.03		0.1	21	ABS 0.0 As 0.01 PO_4 0.55	157[f]	34	72	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER NEAR KLAMATH (STA. 3)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in ppm: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents [d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
							equivalents per million																			
10/3/63 0935	3040	67	10.7	115	195	8.2 / 8.0	___ [c] 1.56		10 / 0.44		0 / 0.00	104 / 1.70		5.0 / 0.14			0.1				22	78	0	3	Median 2.3	USGS
11/14 1040	15100	53	10.5	96	138	7.4 / 8.0	___ [c] 0.16		4.8 / 0.21		0 / 0.00	70 / 1.15		3.0 / 0.08			0.0				15	58	1	5	Maximum 620.	
12/10 1345	12500	46	11.9	100	156	7.5 / 8.0	___ [c] 1.24		7.0 / 0.30		0 / 0.00	80 / 1.31		2.0 / 0.06			0.1				19	62	0	3	Minimum 0.23	
1/15/64 1105	16200	43	12.7	102	135	7.4 / 8.3	___ [c] 1.28		3.8 / 0.17		2 / 0.07	68 / 1.11		2.8 / 0.08			0.1				12	64	5	0		
2/12 1020	22200	45	12.6	104	140	7.4 / 8.2	___ [c] 1.26		4.6 / 0.20		0 / 0.00	78 / 1.28		2.8 / 0.08			0.0				14	63	0	10		
3/11 0945	14200	46	11.7	98	157	7.5 / 8.2	___ [c] 1.28		5.1 / 0.22		0 / 0.00	77 / 1.26		2.5 / 0.07			0.1				15	64	1	2		
4/15 0920	17900	54	10.5	97	158	7.6 / 8.4	___ [c] 1.37		7.0 / 0.30		2 / 0.07	73 / 1.20		3.0 / 0.08			0.0				18	68	5	6		
5/13 0920	13100	57	10.2	98	119	7.7 / 8.1	11 / 0.55	6.0 / 0.49	4.1 / 0.18	0.6 / 0.02	0 / 0.00	65 / 1.07	5.0 / 0.10	1.0 / 0.03	2.0 / 0.03	0.1 / 0.01	0.1	14	ABS 0.0 As 0.00 PO_4 0.05	76 [f]	15	52	0	1		
6/4 0850	9420	58	9.7	94	115	7.5 / 8.3	___ [c] 1.04		4.4 / 0.19		1 / 0.03	62 / 1.02		1.5 / 0.04			0.0				15	52	0	2		
7/15 1215	3860	70	8.8	98	175	7.9 / 8.0	___ [c] 1.48		8.0 / 0.35		0 / 0.00	89 / 1.46		2.5 / 0.07			0.0				19	74	1	1		
8/12 0955	2880	70	9.1	101	223	8.0 / 8.4	___ [c] 1.74		13 / 0.57		2 / 0.07	104 / 1.70		3.5 / 0.10			0.1				25	87	0	3		
9/16 0935	4000	65	8.7	92	209	8.0 / 8.1	19 / 0.95	7.4 / 0.61	11 / 0.48	1.9 / 0.05	0 / 0.00	105 / 1.72	14 / 0.29	4.9 / 0.14	0.6 / 0.01		0.1	19	ABS 0.0 As 0.00 PO_4 0.15	127 [f]	23	78	0	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER AT ORLEANS (STA. 2c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million												Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]			Total ppm	N.C. ppm			
			ppm	%Sat			equivalents per million																		
1/16/64 1325	8220	42	13.4	108	146	7.4 / 8.3	---[c] 1.16		6.8 / 0.30		2 / 0.07	73 / 1.20		3.8 / 0.11			0.1				21	58	0	3		USGS
2/10 1525	11100 est.	44	13.5	112	143	7.6 / 8.2	---[c] 1.20		7.0 / 0.30		0 / 0.00	76 / 1.25		1.5 / 0.04			0.2				20	60	0	10		
3/9 1310	6800	45	12.9	109	164	7.7 / 8.4	---[c] 1.36		7.2 / 0.31		1 / 0.03	85 / 1.39		2.5 / 0.07			0.1				19	68	0	2		
4/13 1300	7800	51	11.9	108	179	7.8 / 8.3	---[c] 1.50		9.0 / 0.39		1 / 0.03	81 / 1.33		3.0 / 0.08			0.0				21	75	7	4		
5/11 1150	8780	55	11.4	109	121	7.8 / 8.1	11 / 0.55	6.0 / 0.49	4.9 / 0.21	0.8 / 0.02	0 / 0.00	65 / 1.07	6.0 / 0.12	1.5 / 0.04	0.7 / 0.01	0.0 / 0.00	0.0	13	ABS 0.0 As 0.00 PO_4 0.05	75[f]	17	52	0	1		
6/2 1400	7020	60	10.6	108	108	7.6 / 8.2	---[c] 0.92		4.5 / 0.20		0 / 0.00	59 / 0.97		1.0 / 0.03			0.0				18	46	0	3		
7/13 1225	2460	74	9.0	106	188	8.1 / 8.3	---[c] 1.48		10 / 0.44		3 / 0.10	87 / 1.43		3.0 / 0.08			0.1				23	74	0	2		
8/10 1125	1840	73	9.0	105	252	8.2 / 8.2	---[c] 1.86		18 / 0.78		0 / 0.00	114 / 1.87		5.4 / 0.15			0.2				30	93	0	4		
9/14 1300	1910	65	10.3	111	212	--- / 8.0	16 / 0.80	2.2 / 0.18	14 / 0.61	2.4 / 0.06	0 / 0.00	106 / 1.74	15 / 0.31	4.6 / 0.13	0.9 / 0.01		0.1	22	ABS 0.0 As 0.00 PO_4 0.30	140[f]	27	78	0	3		

o Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water".

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER NEAR SEIAD VALLEY (STA. 2b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO_3)	Bicarbonates (HCO_3)	Sulfates (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents [d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
10/9/63 1100	2000	63	9.8	106	214	8.0 / 8.0	1.56 [c]		15 / 0.65		0 / 0.00	116 / 1.90		0.2 / 0.17	1.4 / 0.02		0.1		PO_4 0.40		29	78	0	3		
11/6 1235	2380	53	10.6	102	247	8.0 / 8.2	1.72 [c]		17 / 0.74		0 / 0.00	121 / 1.98		0.6 / 0.19	5.0 / 0.08		0.0		PO_4 0.50		30	86	0	5		
12/4 1215	4300	43	12.1	102	264	7.8 / 8.0	1.66 [c]		21 / 0.91		0 / 0.00	115 / 1.88		3.0 / 0.08	6.4 / 0.10		0.1		PO_4 0.45		35	83	0	1		
1/7/64 1305	4360	42	12.5	104	182	7.6 / 8.2	1.30 [c]		12 / 0.52		0 / 0.00	90 / 1.48		5.0 / 0.14	4.4 / 0.07		0.1		PO_4 0.25		29	65	0	3		
2/4 1225	5420	40	12.7	103	206	7.7 / 8.3	1.60 [c]		12 / 0.52		1 / 0.03	106 / 1.74		2.5 / 0.07	4.3 / 0.07		0.3		PO_4 0.40		25	80	0	10		
3/5 1215	3040	45	12.3	107	236	7.9 / 8.0	1.70 [c]		13 / 0.57		0 / 0.00	121 / 1.98		5.0 / 0.14	4.9 / 0.08		0.2		PO_4 0.20		24	88	0	2		
4/8 1100	5000	50	11.2	104	279	8.9 / 8.4	2.12 [c]		17 / 0.74		2 / 0.07	112 / 1.84		5.0 / 0.14	2.9 / 0.05		0.1		PO_4 0.25		26	106	11	7		
5/6 1105	2430	50	11.5	107	205	8.4 / 8.0	18 / 0.90	9.7 / 0.80	11 / 0.48	1.8 / 0.05	0 / 0.00	110 / 1.80	10 / 0.21	6.8 / 0.19	1.0 / 0.02	0.2 / 0.01	0.1	22	ABS 0.0 As 0.00 PO_4 0.10	125 [f]	22	85	0	5		
6/10 1135	3000	60	10.2	107	219	8.2 / 8.3	1.76 [c]		13 / 0.57		2 / 0.07	118 / 1.93		4.0 / 0.11	5.4 / 0.09		0.2		PO_4 0.30		24	88	0	6		
7/7 1140	1290	72	9.2	112	203	8.3 / 8.4	1.82 [c]		15 / 0.65		4 / 0.13	110 / 1.80		3.0 / 0.08	1.1 / 0.02		0.2		PO_4 0.20		26	91	0	3		
8/5 1105	1240	72	9.4	113	311	8.2 / 8.2	2.02 [c]		25 / 1.09		0 / 0.00	132 / 2.16		6.5 / 0.18	1.6 / 0.03		0.2		PO_4 0.40		35	101	0	4		
9/2 1130	1500	64	9.7	100	239	8.4 / 8.0	17 / 0.85	9.1 / 0.75	18 / 0.78	3.0 / 0.08	0 / 0.00	110 / 1.80	22 / 0.46	6.3 / 0.18	1.9 / 0.03		0.1	25	ABS 0.0 As 0.01 PO_4 0.50	164 [f]	32	80	0	7		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER AT SOMESBAR (STA. 2)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH (a) / (b)	Mineral constituents in ppm — equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents [d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ ppm: Total	Hardness as $CaCO_3$ ppm: N.C.	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
10/1/63 1200	2500	66	9.9	108	196	8.2 / 7.9	——— [c] 1.46		13 / 0.57		0 / 0.00	105 / 1.72		5.2 / 0.15			0.1				28	73	0	2	Median 2.3	USGS
11/12 1300	8050	52	11.1	102	154	7.9 / 8.0	——— [c] 1.20		7.0 / 0.30		0 / 0.00	76 / 1.25		3.0 / 0.08			0.0				20	60	0	8	Maximum 23.	
12/9 1515	8100	44	12.7	105	179	7.5 / 8.1	——— [c] 1.30		11 / 0.48		0 / 0.00	85 / 1.39		3.0 / 0.08			0.1				27	65	0	1	Minimum 0.62	
1/16/64 1215	8220	42	13.2	107	147	7.5 / 8.3	——— [c] 1.20		7.2 / 0.31		2 / 0.07	74 / 1.21		3.5 / 0.10			0.1				20	63	0	3		
2/10 1245	11100	43	13.4	110	147	7.6 / 8.2	——— [c] 1.24		6.6 / 0.29		0 / 0.00	78 / 1.28		3.2 / 0.09			0.0				19	62	0	4		
3/9 1200	6800	45	12.8	108	163	7.7 / 8.4	——— [c] 1.30		7.4 / 0.32		1 / 0.03	84 / 1.38		2.5 / 0.07			0.2				19	68	0	1		
4/13 1320	7800	51	11.9	108	177	7.8 / 8.2	——— [c] 1.44		9.0 / 0.39		0 / 0.00	80 / 1.31		2.5 / 0.07			0.0				21	72	6	6		
5/11 1245	8780	56	11.0	107	114	8.1 / 8.1	11 / 0.55	5.5 / 0.45	4.5 / 0.20	0.8 / 0.02	0 / 0.00	62 / 1.02	5.0 / 0.10	1.0 / 0.03	1.8 / 0.03	0.0 / 0.00	0.0	13	ABS 0.1 As 0.00 PO_4 0.05	74 [f]	16	50	0	2		
6/2 1235	7020	59	10.6	106	107	7.7 / 8.2	——— [c] 0.92		3.4 / 0.17		0 / 0.00	58 / 0.95		1.0 / 0.03			0.0				16	46	0	2		
Discontinued																										

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

MAD RIVER NEAR ARCATA (STA. 6a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO_3)	Bicarbonate (HCO_3)	Sulfats (SO_4)	Chlorids (Cl)	Nitrats (NO_3)	Fluorids (F)	Boron (B)	Silica (SiO_2)	Other constituents [d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
10/3/63 1440	365	67	10.2	110	155	8.0 / 8.2	— / 1.48 [c]		3.6 / 0.16		0 / 0.00	89 / 1.46		4.0 / 0.11			0.0				10	74	1	1	Median 6.2	USGS
11/12 1700	1200	55	10.1	95	121	7.4 / 7.4	— / 1.04 [c]		3.5 / 0.15		0 / 0.00	59 / 0.97		3.8 / 0.11			0.1				13	52	4	30	Maximum 230.	
12/10 1540	1570	48	11.4	98	110	7.2 / 7.0	— / 0.95 [c]		3.2 / 0.14		0 / 0.00	54 / 0.89		3.8 / 0.11			0.0				13	47	3	40	Minimum 0.62	
1/15/64 0845	1450	43	12.1	97	107	7.2 / 7.9	— / 0.98 [c]		3.7 / 0.16		0 / 0.00	53 / 0.87		3.5 / 0.10			0.0				14	49	6	25		
2/10 1745	1590	47	11.9	101	103	7.3 / 8.1	— / 0.92 [c]		3.6 / 0.16		0 / 0.00	53 / 0.87		2.2 / 0.06			0.0				15	46	3	45		
3/9 1625	1640	49	11.7	102	103	7.3 / 8.0	— / 0.94 [c]		4.1 / 0.18		0 / 0.00	52 / 0.85		3.5 / 0.10			0.0				16	47	4	35		
4/13 1740	610	58	10.9	106	118	7.8 / 8.1	— / 1.08 [c]		2.6 / 0.11		0 / 0.00	63 / 1.03		4.0 / 0.11			0.0				9	54	2	10		
5/11 1640	530	64	10.0	104	129	7.8 / 8.2	17 / 0.85	4.0 / 0.33	3.9 / 0.17	0.8 / 0.02	0 / 0.00	66 / 1.08	9.0 / 0.19	2.5 / 0.07	1.8 / 0.03	0.1 / 0.01	0.1	6.9	ABS 0.0 As 0.00 PO_4 0.10	83 [f]	12	59	5	10		
6/2 1715	229	69	9.3	103	165	8.1 / 8.4	— / 1.52 [c]		4.7 / 0.20		2 / 0.07	83 / 1.36		2.0 / 0.06			0.1				12	76	5	2		
7/13 1615	190	68	9.4	103	182	8.0 / 8.4	— / 1.06 [c]		4.8 / 0.21		3 / 0.10	91 / 1.49		2.5 / 0.07			0.1				11	83	3	2		
8/10 1605	88	69	9.3	103	189	8.0 / 8.4	— / 1.74 [c]		4.5 / 0.20		2 / 0.07	98 / 1.61		2.0 / 0.06			0.1				10	87	3	2		
9/14 1640	104	67	9.4	101	185	8.1 / 8.2	28 / 1.40	4.4 / 0.36	4.7 / 0.20	1.2 / 0.03	0 / 0.00	100 / 1.64	10 / 0.21	2.5 / 0.07	0.6 / 0.01		0.1	10	ABS 0.0 As 0.00 PO_4 0.00	110 [f]	10	88	6	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of [illegible] Laboratories, Inc. (TTL) for California Department of Water Resources (DWR), as indicated.

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TABLE 5-E (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

MATTOLE RIVER NEAR PETROLIA (STA. 7a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents [d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
10/2/63 0845	43	64	9.6	100	243	7.8 / 8.2	43 / 2.16 [c]		7.4 / 0.34		0 / 0.00	122 / 2.00		6.0 / 0.17			0.0				14	108	8	1	Median 6.2	USGS
11/13 0945	1510	55	10.1	95	132	7.3 / 8.0	21 / 1.04 [c]		5.2 / 0.23		0 / 0.00	59 / 0.97		5.5 / 0.16			0.0				18	52	4	40	Maximum 920.	
12/11 1000	680	45	12.0	99	145	7.2 / 7.8	24 / 1.18 [c]		5.0 / 0.22		0 / 0.00	67 / 1.10		3.9 / 0.11			0.0				16	59	4	8	Minimum 0.62	
1/14/64 0930	300	46	12.2	102	131	7.3 / 7.9	21 / 1.08 [c]		6.0 / 0.26		0 / 0.00	60 / 0.98		3.0 / 0.08			0.0				19	54	5	45		
2/11 1010	890	48	11.9	102	140	7.4 / 8.2	22 / 1.10 [c]		6.4 / 0.28		0 / 0.00	64 / 1.05		3.5 / 0.10			0.0				20	55	3	15		
3/10 0910	472	47	11.7	99	154	7.4 / 8.1	26 / 1.28 [c]		6.9 / 0.30		0 / 0.00	90 / 1.48		5.5 / 0.16			0.1				19	64	0	2		
4/14 1000	285	56	10.6	101	165	7.5 / 8.4	29 / 1.46 [c]		6.8 / 0.30		1 / 0.03	77 / 1.26		5.8 / 0.16			0.0				18	70	5	2		
5/12 1015	149	60	10.3	103	188	8.0 / 8.1	26 / 1.30	3.4 / 0.28	7.2 / 0.31	0.9 / 0.02	0 / 0.00	88 / 1.44	15 / 0.31	2.0 / 0.06	2.1 / 0.03	0.3 / 0.02	0.0	14	ABS 0.1 As 0.00 PO_4 0.10	113 [e]	16	79	7	1		
6/3 0920	105	63	10.0	103	209	7.9 / 8.5	36 / 1.80 [c]		8.3 / 0.36		3 / 0.10	97 / 1.59		1.5 / 0.04			0.2				17	90	6	1		
7/14 0950	52	71	9.7	109	234	8.0 / 8.2	42 / 2.08 [c]		8.6 / 0.37		0 / 0.00	118 / 1.93		3.0 / 0.08			0.1				15	104	7	2		
8/11 0955	42	68	9.1	99	241	7.8 / 8.3	41 / 2.08 [c]		9.0 / 0.39		1 / 0.03	116 / 1.90		4.5 / 0.13			0.2				16	104	7	2		
9/15 0915	26	59	9.7	96	252	7.9 / 8.0	38 / 1.90	3.9 / 0.32	8.8 / 0.38	1.0 / 0.03	0 / 0.00	121 / 1.98	24 / 0.50	4.9 / 0.14	0.8 / 0.01		0.1	9.3	ABS 0.0 As 0.00 PO_4 0.00	150 [e]	14	111	12	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

MIDDLE FORK EEL RIVER AT DOS RIOS (STA. 5c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in ppm: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
10/8/63 1525	13	67	10.1	112	332	8.2 / 8.4	2.76[c]		13 / 0.57		6 / 0.27	114 / 1.87		20 / 0.56			0.4				17	138	31	2		USGS
11/14 1330	3150	52	10.5	98	155	7.8 / 7.8	1.40[c]		3.7 / 0.16		0 / 0.00	74 / 1.21		2.1 / 0.06			0.1				10	70	9	700		
12/12 1435	535	40	13.0	103	182	7.5 / 7.9	1.68[c]		4.1 / 0.18		0 / 0.00	91 / 1.49		2.5 / 0.07			0.1				10	84	9	6		
1/7/64 1655	608	43	12.3	102	173	7.0 / 7.7	1.61[c]		5.0 / 0.22		0 / 0.00	88 / 1.44		3.7 / 0.10			0.0				12	80	8	25		
2/4 1530	2380	46	12.5	108	134	7.1 / 8.1	1.26[c]		3.8 / 0.17		0 / 0.00	71 / 1.16		2.0 / 0.06			0.1				12	63	5	40		
3/11 1015	560	45	12.0	102	179	8.0 / 8.3	1.66[c]		4.7 / 0.20		1 / 0.03	90 / 1.48		2.5 / 0.07			0.1				11	83	8	2		
4/14 1600	100	62	10.5	110	136	7.3 / 8.2	1.28[c]		3.8 / 0.17		0 / 0.00	71 / 1.16		3.2 / 0.09			0.0				12	64	6	6		
5/11 1530	42	67	9.4	104	151	7.1 / 8.2	18 / 0.90	6.1 / 0.50	4.0 / 0.17	0.5 / 0.01	0 / 0.00	77 / 1.26	8.0 / 0.17	2.0 / 0.06	1.8 / 0.03	0.0 / 0.00	0.1	8.3	ABS 0.0 As 0.00 PO_4 0.10	89[f]	11	70	7	1		
6/2 1610	259	72	9.0	106	179	8.2 / 8.3	1.68[c]		4.9 / 0.21		2 / 0.07	88 / 1.44		3.0 / 0.08			0.0				11	84	9	1		
7/14 1840	35	81	8.9	114	267	8.4 / 8.6	2.42[c]		9.1 / 0.40		7 / 0.23	112 / 1.84		8.0 / 0.23			0.2				14	121	18	2		
8/10 1715	13	82	9.0	116	285	8.4 / 8.6	2.40[c]		12 / 0.52		6 / 0.20	101 / 1.66		16 / 0.45			0.3				18	120	27	2		
9/1 1530	6.8	72	10.5	123	334	8.3 / 8.1	39 / 1.95	9.6 / 0.79	13 / 0.57	1.4 / 0.04	0 / 0.00	125 / 2.05	32 / 0.67	24 / 0.68	0.8 / 0.01		0.3	9.3	ABS 0.0 As 0.00 PO_4 0.00	189[f]	17	137	35	2		

o Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

OUTLET CREEK NEAR LONGVALE (STA. 5b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH (a)	pH (b)	Mineral constituents in ppm equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO_3)	Bicarbonate (HCO_3)	Sulfates (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents (d)	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform (h) MPN/ml	Analyzed by (i)
10/8/63 1420	3	67	9.3	103	325	7.8	8.1	2.60 (c)		16 / 0.70		0 / 0.00	153 / 2.51		25 / 0.71			2.3				21	130	5	1		USGS
11/14 1350	3880	54	10.0	96	62	7.2	7.9	0.50 (c)		2.2 / 0.10		0 / 0.00	27 / 0.44		1.1 / 0.03			0.1				17	25	3	220		
12/12 1320	120	48	12.8	113	142	7.6	7.9	1.14 (c)		6.7 / 0.29		0 / 0.00	70 / 1.15		4.5 / 0.13			0.4				20	57	0	5		
1/7/64 1555	292	46	11.9	103	118	7.4	7.8	0.96 (c)		5.9 / 0.26		0 / 0.00	56 / 0.92		4.8 / 0.14			0.2				21	48	2	10		
2/4 1410	269	48	12.2	108	120	7.8	7.9	0.98 (c)		5.8 / 0.25		0 / 0.00	60 / 0.98		4.2 / 0.12			0.2				20	49	0	10		
3/11 0900	68	47	10.3	90	164	8.4	8.1	1.34 (c)		7.2 / 0.31		0 / 0.00	81 / 1.33		5.0 / 0.14			0.4				19	67	1	2		
4/14 1345	66	68	9.6	108	178	8.2	8.2	1.52 (c)		8.5 / 0.37		0 / 0.00	91 / 1.49		8.0 / 0.23			0.5				20	76	1	0		
5/11 1420	36	72	9.3	109	197	8.2	8.2	20 / 1.00	7.8 / 0.64	8.7 / 0.38	0.9 / 0.02	0 / 0.00	100 / 1.64	7.0 / 0.15	4.5 / 0.13	2.3 / 0.04	0.2 / 0.01	0.7	10	ABS 0.0 As 0.00 PO_4 0.05	113 (f)	19	82	0	1		
6/2 1520	15	73	10.5	125	237	8.3	8.4	2.02 (c)		11 / 0.48		2 / 0.07	122 / 2.00		9.0 / 0.25			0.8				19	101	0	1		
7/14 1740	2.6	83	8.3	108	290	8.4	8.0	2.34 (c)		14 / 0.61		0 / 0.00	145 / 2.38		14 / 0.39			1.5				21	117	0	2		
8/10 1620	2.1	85	9.1	122	290	8.3	8.3	2.34 (c)		17 / 0.74		1 / 0.03	139 / 2.28		19 / 0.54			1.8				24	117	1	1		
9/1 1350	0.7	69	9.6	109	312	8.2	8.0	29 / 1.45	12 / 0.97	17 / 0.74	1.6 / 0.04	0 / 0.00	141 / 2.31	7.0 / 0.15	25 / 0.71	0.3 / 0.00		2.0	12	ABS 0.1 As 0.00 PO_4 0.00	182 (f)	23	121	5	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

REDWOOD CREEK AT ORICK (STA. 3b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH (a) / (b)	Mineral constituents in ppm: Calcium (Co)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chlorides (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							equivalents per million																			
10/3/63 0810	23	60	7.9	79	136	7.0 / 7.2	1.12[c]		5.1 / 0.22		0 / 0.00	62 / 1.02		7.2 / 0.20			0.0				16	56	5	4	Median 23.	USGS
11/14 0920	2330	54	10.1	94	74	7.2 / 7.4	0.56[c]		3.0 / 0.13		0 / 0.00	28 / 0.46		3.6 / 0.10			0.1				19	28	5	130	Maximum 230.	
12/10 1440	939	48	11.3	97	87	7.2 / 7.7	0.68[c]		3.2 / 0.14		0 / 0.00	37 / 0.61		2.5 / 0.07			0.0				17	34	4	20	Minimum 2.3	
1/15/64 0950	1590	44	12.2	99	74	7.2 / 8.2	0.60[c]		2.4 / 0.10		0 / 0.00	32 / 0.52		4.0 / 0.11			0.1				14	30	4	1		
2/12 0900	855	45	12.0	99	79	7.2 / 7.9	0.64[c]		3.4 / 0.15		0 / 0.00	32 / 0.52		4.8 / 0.14			0.0				19	32	6	50		
3/11 0850	1020	46	11.4	95	82	7.2 / 8.0	0.66[c]		4.0 / 0.17		0 / 0.00	35 / 0.57		2.0 / 0.06			0.1				20	33	4	25		
4/15 0810	482	52	10.9	99	90	7.2 / 8.1	0.77[c]		3.6 / 0.16		0 / 0.00	32 / 0.64		5.5 / 0.16			0.0				17	38	6	7		
5/13 0800	356	55	10.3	97	100	7.2 / 8.0	15 / 0.75	0.9 / 0.07	3.5 / 0.15	0.6 / 0.02	0 / 0.00	46 / 0.75	7.0 / 0.15	1.0 / 0.03	0.7 / 0.01	0.2 / 0.01	0.0	6.5	ABS 0.0 As 0.00 PO_4 0.00	63[e]	15	41	3	8		
6/4 0730	184	58	9.6	93	122	7.2 / 8.2	1.04[c]		1.8 / 0.08		0 / 0.00	56 / 0.92		2.5 / 0.07			0.0				7	52	6	2		
7/15 1105	130	64	9.3	97	133	7.2 / 8.1	1.22[c]		4.9 / 0.21		0 / 0.00	61 / 1.00		4.0 / 0.11			0.0				15	61	11	2		
8/12 0840	62	61	9.0	91	146	7.2 / 8.2	1.26[c]		5.1 / 0.22		0 / 0.00	67 / 1.10		3.5 / 0.10			0.1				15	63	8	2		
9/16 0825	25	58	8.7	85	145	6.9 / 7.9	22 / 1.10	1.7 / 0.14	5.2 / 0.23	0.6 / 0.02	0 / 0.00	65 / 1.07	8.0 / 0.17	5.4 / 0.15	0.1 / 0.00		0.0	7.0	ABS 0.0 As 0.00 PO_4 0.05	97[e]	15	62	9	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water".

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

SALMON RIVER AT SOMESBAR (STA. 2a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/ b/	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_3)	Other constituents d	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform h MPN/ml	Analyzed by i
							equivalents per million																			
10/1/63 1245	185	65	10.3	111	142	8.2 7.8	1.30 c		0.15		0.00	1.29		0.06			0.0				10	65	0	1	Median 2.3	USGS
11/12 1320	1650	49	11.2	100	82	7.4 7.5	0.76 c		0.07		0.00	0.70		0.03			0.1				8	38	3	3	Maximum 13.	
12/9 1550	1230	44	12.2	101	93	7.3 7.8	0.84 c		0.08		0.00	0.82		0.01			0.1				9	42	1	1	Minimum 0.23	
1/16/64 1245	1640	42	13.1	106	106	7.3 8.2	1.04 c		0.07		0.00	0.98		0.04			0.1				6	52	3	0		
2/10 1310	2780	43	13.0	106	112	7.4 8.2	1.00 c		0.10		0.00	1.05		0.03			0.0				9	53	1	3		
3/9 1230	1460	45	12.4	104	108	7.5 8.2	1.00 c		0.11		0.00	1.02		0.03			0.1				10	50	0	10		
4/13 1350	2170	49	11.9	106	86	7.4 8.0	0.81 c		0.10		0.00	0.75		0.07			0.0				11	40	2	1		
5/11 1315	2380	57	11.3	111	68	7.4 8.0	0.48	0.14	0.08	0.01	0.00	0.57	0.04	0.03	0.07	0.01	0.0	10.0	ABS 0.0 As 0.00 PO 0.00	49 f	11	31	2	1		
6/2 1310	2310	55	10.6	102	57	7.2 7.9	0.52 c		0.08		0.00	0.52		0.01			0.0				13	26	0	1		
7/	Not Sampled																									
8/	Not Sampled																									
9/14 1205	242	63	10.0	105	137	8.2 8.2	0.95	0.27	0.17	0.02	0.00	1.25	0.10	0.06	0.01		0.2	15	ABS 0.0 As 0.00 PO 0.05	80 f	12	61	0	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

SCOTT RIVER NEAR FORT JONES (STA. 1b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
10/8/63 1500	128	64	11.3	130	288	8.4 / 8.2	2.94[c]		4.8 / 0.21		0 / 0.00	181 / 2.97		3.5 / 0.10			0.0				7	147	0	2	Median 6.2	USGS
11/5 1600	120	52	10.5	104	259	8.0 / 8.5	2.61[c]		3.8 / 0.17		5 / 0.17	150 / 2.46		3.8 / 0.11			0.1				6	130	0	5	Maximum 230.	
12/3 1545	810	43	11.1	98	159	7.3 / 8.2	1.56[c]		2.6 / 0.11		0 / 0.00	95 / 1.56		1.0 / 0.03			0.0				7	78	0	3	Minimum 0.62	
1/6/64 1545	454	40	11.5	98	153	7.4 / 8.4	1.56[c]		2.2 / 0.10		2 / 0.07	86 / 1.41		2.5 / 0.07			0.0				6	78	4	0		
2/3 1620	890	44	11.8	106	186	7.3 / 8.4	1.86[c]		3.6 / 0.16		2 / 0.07	105 / 1.72		1.5 / 0.04			0.1				8	93	4	10		
3/4 1530	630	50	11.7	113	195	8.0 / 8.5	1.94[c]		4.2 / 0.18		3 / 0.10	111 / 1.82		4.5 / 0.13			0.1				8	97	1	1		
4/7 1515	537	57	13.1	138	184	8.4 / 8.4	1.90[c]		3.5 / 0.15		3 / 0.10	105 / 1.72		3.2 / 0.09			0.0				7	95	4	3		
5/5 1530	478	53	10.5	105	188	7.7 / 8.0	19 / 0.95	11 / 0.87	3.8 / 0.17	0.9 / 0.02	0 / 0.00	108 / 1.77	4.0 / 0.08	2.0 / 0.06	2.5 / 0.04	0.2 / 0.01	0.0	19	ABS 0.0 PO_4 0.00 As 0.00	126[f]	8	91	2	1		
6/9 1500	885	58	9.5	102	150	7.5 / 8.3	1.44[c]		3.0 / 0.13		2 / 0.07	84 / 1.38		1.0 / 0.03			0.0				8	72	0	3		
7/6 1440	185	75	11.7	151	245	8.4 / 8.6	2.48[c]		4.5 / 0.20		8 / 0.27	134 / 2.20		2.5 / 0.07			0.0				7	124	1	1		
8/4 1500	52	72	9.5	121	279	8.2 / 8.6	2.88[c]		5.1 / 0.22		9 / 0.30	151 / 2.47		3.4 / 0.10			0.0				7	144	5	2		
9/1 1450	45	60	12.3	135	273	8.3 / 8.4	32 / 1.60	13 / 1.08	5.3 / 0.23	0.6 / 0.02	4 / 0.13	151 / 2.47	4.0 / 0.08	4.8 / 0.14			0.2	19	ABS 0.0 PO_4 0.05 As 0.00	154[f]	8	134	4	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of [illegible] California Department of Water Resources (DWR); as indicated.

32505-D-H 6-61 200 SPO

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

SHASTA RIVER NEAR YREKA (STA. 1a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents d	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform h MPN/ml	Analyzed by i
10/9/63 1210	146	60	9.5	103	556	8.3 / 8.6	4.38 c		1.91		0.57	4.92		0.76			0.6				31	219	0	4	Median 62.	USGS
11/6 0845	225	49	10.7	100	492	8.4 / 8.8	3.77 c		1.48		0.53	4.20		0.65			0.6				28	188	0	5	Maximum 2400.	
12/4 1405	210	43	12.2	105	494	8.4 / 8.6	3.85 c		1.61		0.50	4.26		0.56			0.6				29	193	0	3	Minimum 2.1	
1/7/64 0850	240	43	11.5	99	515	8.2 / 8.7	3.84 c		1.65		0.50	4.26		0.68			0.6				30	192	0	5		
2/4 0900	292	41	12.1	102	513	8.2 / 8.7	4.22 c		1.61		0.47	4.56		0.56			0.6				28	211	0	10		
3/5 1400	252	50	11.1	105	480	8.4 / 8.6	3.82 c		1.44		0.30	4.34		0.51			0.4				27	191	0	7		
4/8 0725	132	51	10.4	100	500	8.4 / 8.5	4.16 c		1.65		0.27	4.62		0.59			0.5				28	208	0	2		
5/6 0730	145	47	10.9	100	643	8.4 / 8.9	1.80	3.40	2.00	0.09	0.40	5.87	0.21	0.76	0.02	0.02	0.5	44	ABC 0.0 As 0.01 PO_4 0.60	393 f	28	260	0	4		
6/10 0740	346	58	9.3	100	571	8.4 / 8.7	4.30 c		2.00		0.50	4.98		0.54			1.1				33	215	0	9		
7/7 0730	30	70	7.9	95	680	8.4 / 8.7	5.50 c		2.20		0.80	6.00		0.87			0.7				29	279	0	2		
8/5 1300	12	77	9.9	127	703	8.4 / 8.9	5.76 c		2.44		1.17	5.97		0.8			0.8				30	288	0	4		
9/2 0740	42	56	9.3	95	758	8.4 / 8.5	2.30	3.84	2.61	0.11	0.50	6.87	0.33	1.07	0.02		0.6	53	ABS 0.1 As 0.00 PO_4 0.50	478 f	29	307	0	7		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

SMITH RIVER NEAR CRESCENT CITY (STA. 3a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents d	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform h MPN/ml	Analyzed by i
10/3/63 1115	212	62	10.0	103	141	8.0 a / 8.3 b	1.38 c		2.6 / 0.11		0 / 0.00	81 / 1.33		2.8 / 0.08			0.1				7	69	3	1	Median 2.3	USGS
11/14 1220	17500	53	12.0	110	77	7.3 / 7.7	0.73 c		1.4 / 0.06		0 / 0.00	42 / 0.69		1.8 / 0.05			0.0				8	37	3	90	Maximum 23.	
12/10 1020	3580	45	12.7	105	97	7.3 / 7.8	0.94 c		1.7 / 0.07		0 / 0.00	54 / 0.89		0.5 / 0.01			0.0				7	47	3	1	Minimum 0.20	
1/15/64 1315	4180	45	13.1	108	91	7.3 / 8.2	0.88 c		1.4 / 0.06		0 / 0.00	50 / 0.82		3.0 / 0.08			0.0				6	44	3	0		
2/12 1245	3030	44	13.1	107	87	7.3 / 8.0	0.82 c		1.5 / 0.06		0 / 0.00	48 / 0.79		2.0 / 0.06			0.0				9	41	2	1		
3/11 1110	4260	45	12.5	103	88	7.3 / 8.1	0.82 c		2.2 / 0.10		0 / 0.00	40 / 0.80		2.0 / 0.06			0.1				11	41	1	8		
4/15 1210	2300	50	12.0	106	89	7.4 / 8.3	0.88 c		2.0 / 0.09		0 / 0.00	40 / 0.80		4.0 / 0.11			0.0				9	44	3	1		
5/13 1045	1810	53	11.5	105	88	7.6 / 7.8	6.4 / 0.32	7.4 / 0.58	1.6 / 0.07	0.3 / 0.01	0 / 0.00	50 / 0.82	3.0 / 0.06	1.0 / 0.03	3.1 / 0.05	0.0 / 0.00	0.0	13	ABS 0.0 As 0.00 PO_4 0.00	54 f	7	45	4	1		
6/4 1040	1010	57	10.8	104	97	7.4 / 8.2	0.92 c		2.4 / 0.10		0 / 0.00	54 / 0.89		1.0 / 0.03			0.0				10	46	2	1		
7/15 1430	576	64	9.9	103	122	8.0 / 8.2	1.20 c		3.5 / 0.15		0 / 0.00	70 / 1.15		1.5 / 0.04			0.0				11	60	3	1		
8/11 1200	304	68	8.4	100	131	7.8 / 8.3	1.28 c		2.3 / 0.12		1 / 0.03	74 / 1.21		1.0 / 0.03			0.0				9	64	2	3		
9/10 1130	202	63	10.1	104	135	8.1 / 8.1	8.4 / 0.42	11 / 0.90	3.0 / 0.13	0.3 / 0.01	0 / 0.00	76 / 1.25	3.0 / 0.06	2.7 / 0.08	0.1 / 0.00		0.2	12	ABS 0.0 As 0.00 PO_4 0.05	78 f	9	66	4	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

SOUTH FORK EEL RIVER NEAR MIRANDA (STA. 7)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents d	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform h MPN/ml	Analyzed by i
10/2/63 1215	50	69	9.8	109	244	8.2 / 8.2	2.20 c		8.3 / 0.36		0 / 0.00	120 / 2.28		9.6 / 0.27			0.0				14	110	0	1	Median 1.2	USGS
11/13 1250	1390	56	10.1	97	139	7.5 / 8.0	1.14 c		5.5 / 0.24		0 / 0.00	70 / 1.15		5.4 / 0.15			0.1				17	57	0	5	Maximum 230.	
12/11 1240	964	46	11.7	99	141	7.4 / 8.0	1.16 c		5.5 / 0.24		0 / 0.00	71 / 1.16		5.0 / 0.14			0.1		As 0.00		17	58	0	1	Minimum 0.23	
1/14/64 1240	1400	45	12.0	100	131	7.4 / 8.0	1.12 c		6.6 / 0.29		0 / 0.00	66 / 1.08		5.0 / 0.14			0.0				21	56	2	30		
2/11 1315	1130	49	11.7	103	142	7.6 / 8.3	1.16 c		6.4 / 0.28		1 / 0.03	72 / 1.18		4.0 / 0.11			0.0				19	58	0	2		
3/10 1215	582	50	11.7	104	153	7.6 / 8.3	1.31 c		6.9 / 0.30		2 / 0.07	76 / 1.25		6.1 / 0.17			0.1				19	66	0	2		
4/14 1315	528	61	10.2	104	159	7.8 / 8.4	1.40 c		6.9 / 0.30		2 / 0.07	82 / 1.34		5.9 / 0.17			0.1				18	70	0	3		
5/12 1245	270	66	9.7	105	183	8.2 / 8.2	20 / 1.00	6.6 / 0.54	7.4 / 0.32	1.0 / 0.03	0 / 0.00	96 / 1.57	7.0 / 0.15	2.5 / 0.07	2.5 / 0.04	0.2 / 0.01	0.0	13	ABS 0.0 As 0.00 PO_4 0.05	104 f	17	77	0	1		
6/3 1300	168	70	9.2	103	164	8.2 / 8.5	1.74 c		8.3 / 0.36		3 / 0.10	101 / 1.66		4.0 / 0.11			0.2				17	87	0	20		
7/14 1400	60	75	10.4	123	222	8.3 / 8.5	1.94 c		9.2 / 0.40		6 / 0.20	110 / 1.80		5.5 / 0.16	0.8 / 0.01		0.1		PO_4 0.00		17	97	0	1		
8/11 1310	40	72	9.0	103	219	8.4 / 8.4	1.86 c		9.4 / 0.41		2 / 0.07	114 / 1.87		6.2 / 0.17	1.1 / 0.02		0.2		PO_4 0.10		18	93	0	2		
9/15 1245	32	66	9.2	99	248	8.3 / 8.2	29 / 1.45	10 / 0.83	9.9 / 0.43	1.2 / 0.03	0 / 0.00	139 / 2.28	9.0 / 0.19	7.4 / 0.21	0.9 / 0.01		0.1	4.7	ABS 0.0 As 0.00 PO_4 0.00	157 f	15	114	0	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

TRINITY RIVER NEAR BURNT RANCH (STA. 4b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a-b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO_3)	Bicarbonate (HCO_3)	Sulfates (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluorids (F)	Boron (B)	Silica (SiO_2)	Other constituents d	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform h MPN/ml	Analyzed by i
							equivalents per million																			
10/4/63 0915	295	63	9.5	101	159	8.0 / 8.1	1.42 c		4.3 / 0.19		0 / 0.00	84 / 1.38		4.0 / 0.17			0.1				12	71	2	1		
11/12 1000	1360	51	11.0	101	119	7.5 / 8.0	1.09 c		2.4 / 0.10		0 / 0.00	64 / 1.05		2.8 / 0.08			0.0				8	55	3	3		
12/9 1200	1530	44	11.7	98	138	7.6 / 8.0	1.32 c		2.4 / 0.10		0 / 0.00	77 / 1.26		2.5 / 0.07			0.1				7	66	3	1		
1/16/64 1600	1180	43	12.6	104	153	7.5 / 8.4	1.56 c		2.7 / 0.12		2 / 0.07	80 / 1.31		4.0 / 0.11			0.1				7	78	9	15		
2/10 1040	2260	44	12.5	105	154	7.4 / 8.3	1.50 c		3.4 / 0.15		2 / 0.07	85 / 1.39		3.5 / 0.10			0.1				9	75	2	6		
3/9 0940	1240	45	11.8	101	150	7.6 / 8.5	1.38 c		3.8 / 0.17		2 / 0.07	81 / 1.33		2.0 / 0.06			0.2				11	69	1	2		
4/13 1010	1340	54	11.0	105	130	7.7 / 8.3	1.24 c		3.2 / 0.14		1 / 0.03	70 / 1.15		4.5 / 0.13			0.0				10	62	3	1		
5/11 0910	1090	58	10.1	101	121	7.8 / 8.1	15 / 0.75	4.7 / 0.39	2.9 / 0.13	0.3 / 0.01	0 / 0.00	66 / 1.08	4.0 / 0.08	1.5 / 0.04	2.8 / 0.05	0.2 / 0.01	0.0	13	ABS 0.0 As 0.00 PO_4 0.05	73 f	10	57	3	1		
6/2 0915	964	59	10.1	103	101	7.4 / 8.1	0.92 c		2.8 / 0.12		0 / 0.00	53 / 0.87		1.5 / 0.04			0.0				12	46	3	1		
7/13 1020	410	75	8.6	104	139	7.9 / 8.1	1.26 c		4.1 / 0.18		0 / 0.00	72 / 1.18		3.5 / 0.10			0.0				12	63	4	1		
8/13 1040	231	72	8.4	98	163	8.0 / 8.2	1.46 c		5.0 / 0.22		0 / 0.00	84 / 1.38		3.5 / 0.10			0.1				13	73	4	3		
9/14 0940	215	64	8.9	96	166	8.0 / 8.3	20 / 1.00	6.1 / 0.50	4.8 / 0.21	0.6 / 0.02	1 / 0.03	83 / 1.36	5.0 / 0.10	7.5 / 0.21	0.3 / 0.00		0.0	12	ABS 0.0 As 0.00 PO_4 0.05	102 f	12	75	5	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

TRINITY RIVER NEAR HOOPA (STA. 4)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents d	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform h MPN/ml	Analyzed by i
							equivalents per million																			
10/1/63 1210	470	68	9.3	108	200	8.2 / 8.0	— / 1.90 c		4.5 / 0.20		0 / 0.00	110 / 1.80		5.2 / 0.15			0.1				10	95	5	1	Median 1.8	USGS
11/12 1525	3540	55	10.8	100	144	7.1 / 8.0	— / 1.35 c		2.6 / 0.11		0 / 0.00	78 / 1.28		2.6 / 0.07			0.1				8	67	3	9	Maximum 23.	
12/9 1250	3350	45	12.0	99	157	7.6 / 8.0	— / 1.50 c		2.6 / 0.11		0 / 0.00	88 / 1.44		2.5 / 0.07			0.0				7	75	3	8	Minimum 0.21	
1/15/64 1110	4340	43	12.7	103	158	7.2 / 8.2	— / 0.92 c		2.2 / 0.10		0 / 0.00	53 / 0.87		3.5 / 0.10			0.0				10	46	3	1		
2/10 1600	7600	45	12.0	105	153	7.7 / 8.2	— / 1.48 c		3.1 / 0.13		0 / 0.00	88 / 1.44		1.0 / 0.03			0.1				8	74	2	10		
3/9 1430	3090	47	11.9	102	145	7.4 / 8.4	— / 1.48 c		3.3 / 0.14		1 / 0.03	87 / 1.43		1.0 / 0.03			0.1				9	74	1	2		
4/13 1100	3480	52	11.1	101	144	7.5 / 8.4	— / 1.40 c		3.3 / 0.14		2 / 0.07	78 / 1.28		4.1 / 0.12			0.0				9	70	3	1		
5/11 1010	2480	58	10.5	103	140	8.0 / 8.3	18 / 0.90	6.6 / 0.54	3.4 / 0.15	0.4 / 0.01	1 / 0.03	75 / 1.23	6.0 / 0.12	2.0 / 0.06	2.0 / 0.03	0.1 / 0.01	0.1	15	ABS 0.0 As 0.00 PO_4 0.05	88 f	10	67	4	1		
6/ 1530	1920	64	9.9	104	131	7.6 / 8.2	— / 1.24 c		5.7 / 0.25		0 / 0.00	72 / 1.18		2.0 / 0.06			0.0				17	62	3	1		
7/13 1425	409	78	8.0	105	171	8.2 / 8.2	— / 1.04 c		4.3 / 0.19		0 / 0.00	92 / 1.51		3.0 / 0.08	1.0 / 0.02		0.0		PO_4 0.00		10	82	7	1		
8/10 1540	460	74	8.9	104	191	8.2 / 8.4	— / 1.82 c		4.9 / 0.21		2 / 0.07	98 / 1.61		3.0 / 0.08	3.3 / 0.05		0.1		PO_4 0.05		10	91	7	2		
9/1 1425	400	67	9.5	103	199	8.1 / 8.3	24 / 1.20	8.0 / 0.66	5.3 / 0.23	0.9 / 0.02	2 / 0.07	100 / 1.64	8.0 / 0.17	5.6 / 0.16	0.6 / 0.01		0.0	13	ABS 0.0 As 0.00 PO_4 0.00	115 f	11	93	8	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2 (Continued)

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

TRINITY RIVER AT LEWISTON (STA. 4a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/ b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO_3)	Bicarbonates (HCO_3)	Sulfates (SO_4)	Chloride (Cl)	Nitrates (NO_3)	Fluorides (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							equivalents per million																			
10/1/63 0820	247	50	12.0	113	93	7.4 / 7.8	0.87[c]		2.1 / 0.09		0 / 0.00	52 / 0.85		1.8 / 0.05			0.0				9	44	1	2	Median 5.6	USGS
11/12 0830	258	47	11.1	100	101	7.4 / 8.0	0.89[c]		2.8 / 0.12		0 / 0.00	45 / 0.74		2.2 / 0.06			0.1				12	44	7	5	Maximum 92.	
12/9 1045	270	45	11.6	102	94	7.4 / 7.7	0.90[c]		1.7 / 0.07		0 / 0.00	52 / 0.85		1.0 / 0.03			0.0		As 0.00		7	45	2	1	Minimum 0.62	
1/13/64 0900	270	44	11.9	103	92	7.3 / 8.2	0.87[c]		1.4 / 0.06		0 / 0.00	50 / 0.82		1.5 / 0.04			0.1				6	44	3	0		
2/10 0905	273	45	12.8	113	94	7.3 / 8.0	0.88[c]		2.6 / 0.11		0 / 0.00	51 / 0.84		4.5 / 0.13			0.2				11	44	2	7		
3/9 0810	270	45	11.4	100	99	7.3 / 8.2	0.92[c]		2.6 / 0.11		0 / 0.00	54 / 0.89		1.5 / 0.04			0.1				11	46	2	1		
4/13 0835	224	46	11.6	103	96	7.3 / 8.2	0.94[c]		2.5 / 0.11		0 / 0.00	54 / 0.89		3.2 / 0.09			0.0				10	47	3	1		
5/11 0735	152	49	10.9	101	94	7.5 / 7.7	7.6 / 0.38	6.3 / 0.52	2.1 / 0.09	0.5 / 0.01	0 / 0.00	52 / 0.85	2.0 / 0.04	1.0 / 0.03	2.4 / 0.04	0.2 / 0.01	0.0	12	ABS 0.0 As 0.00 PO_4 0.00	59[f]	9	45	2	1		
6/2 0730	159	50	11.0	103	96	7.3 / 8.2	0.90[c]		2.2 / 0.10		0 / 0.00	53 / 0.87		1.0 / 0.03			0.1				10	45	2	1		
7/13 0850	152	52	10.6	102	93	7.6 / 8.1	0.90[c]		2.4 / 0.10		0 / 0.00	52 / 0.85		1.2 / 0.04	0.8 / 0.01		0.0		PO_4 0.00		10	45	2	1		
8/10 0800	155	50	10.1	95	93	7.5 / 7.9	0.86[c]		2.0 / 0.09		0 / 0.00	52 / 0.85		0.5 / 0.01	1.0 / 0.02		0.0		PO_4 0.00		9	43	0	2		
9/14 0750	161	48	10.0	91	92	7.4 / 8.1	6.4 / 0.32	6.8 / 0.56	2.4 / 0.10	0.4 / 0.01	0 / 0.00	52 / 0.85	2.0 / 0.04	1.2 / 0.03	0.4 / 0.01		0.1	12	ABS 0.0 As 0.00 PO_4 0.05	59[f]	10	44	1	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of [illegible] (TTL) [illegible] California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

VAN DUZEN RIVER NEAR BRIDGEVILLE (STA. 5a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH Field[a]	pH Lab[b]	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
								equivalents per million																			
10/2/63 1450	11	67	10.9	119	241	8.2 / 8.3		Ca 2.18[c]		Na 6.8 / 0.30		CO_3 4 / 0.13	HCO_3 120 / 1.97		Cl 4.2 / 0.12			B 0.1				12	109	4	2	Median 2.3	USGS
11/13 1530	572	54	10.6	99	145	7.5 / 7.9		Ca 1.31[c]		Na 3.3 / 0.14		CO_3 0 / 0.00	HCO_3 74 / 1.21		Cl 2.4 / 0.07			B 0.1				10	66	5	20	Maximum 620.	
12/11 1535	410	43	12.3	100	139	7.4 / 8.0		Ca 1.26[c]		Na 3.8 / 0.16		CO_3 0 / 0.00	HCO_3 70 / 1.15		Cl 1.0 / 0.03			B 0.1				11	63	6	15	Minimum 0.06	
1/14/64 1515	732	43	12.7	103	129	7.3 / 8.5		Ca 1.18[c]		Na 2.9 / 0.13		CO_3 2 / 0.07	HCO_3 64 / 1.05		Cl 1.8 / 0.05			B 0.1				10	59	3	25		
2/11 1535	627	45	12.3	103	122	7.3 / 8.2		Ca 1.12[c]		Na 3.9 / 0.17		CO_3 0 / 0.00	HCO_3 66 / 1.08		Cl 1.8 / 0.05			B 0.0				13	56	2	10		
3/10 1500	500	47	11.9	102	129	7.5 / 8.3		Ca 1.14[c]		Na 4.6 / 0.20		CO_3 1 / 0.03	HCO_3 63 / 1.03		Cl 2.0 / 0.06			B 0.1				15	57	4	9		
4/14 1550	296	61	9.9	101	142	7.8 / 8.2		Ca 1.34[c]		Na 3.9 / 0.17		CO_3 0 / 0.00	HCO_3 76 / 1.25		Cl 3.0 / 0.08			B 0.0				11	67	5	3		
5/12 1525	204	65	9.0	102	158	8.1 / 8.2		Ca 1.10	Mg 0.36	Na 4.9 / 0.21	K 0.02	CO_3 0 / 0.00	HCO_3 82 / 1.34	SO_4 9.0 / 0.19	Cl 1.5 / 0.04	NO_3 3.3 / 0.05	F 0.2 / 0.01	B 0.0	SiO_2 10	ABS 0.0 As 0.00 PO_4 0.05	91[f]	12	73	6	5		
6/3 1530	88	68	9.0	100	178	8.4 / 8.4		Ca 1.64[c]		Na 4.9 / 0.21		CO_3 3 / 0.10	HCO_3 90 / 1.48		Cl 1.0 / 0.03			B 0.1				11	82	3	2		
7/15 0750	31	68	7.9	95	210	7.9 / 8.7		Ca 2.03[c]		Na 6.1 / 0.27		CO_3 0 / 0.00	HCO_3 114 / 1.87		Cl 2.5 / 0.07			B 0.1				12	101	8	1		
8/11 1530	8.5	69	10.1	113	236	8.4 / 8.5		Ca 2.16[c]		Na 7.0 / 0.30		CO_3 4 / 0.13	HCO_3 118 / 1.93		Cl 2.0 / 0.06			B 0.2				12	108	5	2		
9/13 1520	10	71	10.1	114	250	8.4 / 8.2		Ca 1.85	Mg 0.43	Na 7.6 / 0.33	K 0.03	CO_3 0 / 0.00	HCO_3 128 / 2.10	SO_4 19 / 0.40	Cl 4.0 / 0.11	NO_3 0.5 / 0.01		B 0.2	SiO_2 6.3	ABS 0.0 As 0.00 PO_4 0.05	137[f]	12	114	9	1		

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Heavy metals reported in table of "Spectrographic Analyses of Surface Water"

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-3

SPECTROGRAPHIC ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Station	Sta No	Date	Constituents in parts per billion															
			Aluminum (Al)	Beryllium (Be)	Bismuth (Bi)	Cadmium (Cd)	Cobalt (Co)	Chromium (Cr)	Copper (Cu)	Iron (Fe)	Gallium (Ga)	Germanium (Ge)	Manganese (Mn)	Molybdenum (Mo)	Nickel (Ni)	Lead (Pb)	Titanium (Ti)	Vanadium (V)	Zinc (Zn)
Eel River, Middle Fork at Dos Rios	5c	5-11	1.2**	0.50*	0.25*	1.2*	1.2**	1.2*	2.4	1.6	5.0*	0.25*	1.2*	0.25**	0.88	1.2*	0.50*	0.25**	5.0*
		9-1	3.4	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	2.1	5.7*	0.29*	1.4*	1.7	0.91	1.4*	0.57*	0.80	5.7*
Eel River at Scotia	6	5-12	1.2**	0.50*	0.25*	1.2*	1.2**	1.2*	68	3.8	5.0*	0.25*	1.2*	0.25**	0.80	2.0	0.50*	0.25**	5.0*
		9-15	7.3	1.3*	0.67*	3.3*	3.3*	3.3*	3.3*	7.3	13*	0.67*	3.3*	0.67**	0.80	3.3*	1.3*	1.4	13*
Klamath River below Iron Gate Dam	1f	5-6	146	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	31	5.7*	0.29*	1.4*	0.80	0.94	1.4*	5.1	10	5.7*
		9-2	13	1.3*	0.67*	3.3*	3.3*	3.3*	3.3*	14	13*	0.67*	3.3*	0.67**	0.87	3.3*	1.3*	12	13*
Klamath River near Klamath	3	5-13	1.9	0.50*	0.25*	1.2*	1.2*	1.2*	3.0	4.8	5.0*	0.25*	1.2*	0.25**	2.4	1.2*	0.50*	1.0	5.0*
		9-16	7.3	1.3*	0.67*	3.3*	3.3*	3.3*	3.3*	6.0	13*	0.67*	3.3*	0.67**	2.1	3.3*	1.3*	5.3	13*
Klamath River at Orleans	2c	5-11	1.2**	0.50*	0.25*	1.2*	1.2**	1.2*	1.2**	4.5	5.0*	0.25*	1.2*	0.25**	1.8	1.2*	0.50*	1.6	5.0*
		9-14	7.3	1.3*	0.67*	3.3*	3.3*	3.3*	3.3*	6.5	13*	0.67*	3.3*	0.67**	1.7	3.3*	1.3*	6.7	13*
Klamath River near Seiad Valley	2b	5-6	9.1	0.57*	0.29*	1.4*	1.4*	1.4*	1.9	10	5.7*	0.29*	1.4*	0.54	1.9	1.4*	0.57*	3.4	5.7*
		9-2	5.0	1.3*	0.67*	3.3*	3.3**	3.3*	3.3*	4.4	13*	0.67*	3.3*	1.8	1.1	3.3*	1.3*	8.7	13*
Mad River near Arcata	6a	5-11	5.0	0.50*	0.25*	1.2*	1.2*	1.2*	3.2	8.0	5.0*	0.25*	1.2*	0.25**	0.75	1.2*	0.88	0.25	5.0*
		9-14	8.7	1.3*	0.67*	3.3*	3.3*	3.3*	3.3*	4.4	13*	0.67*	3.3*	0.67*	0.67	3.3*	1.3*	0.67*	13*
Trinity River near Hoopa	4	5-11	1.2**	0.50*	0.25*	1.2*	1.2*	1.2*	1.2**	2.4	5.0*	0.25*	1.2*	0.25**	1.7	1.2*	0.50*	0.42	5.0*
		9-14	6.7	1.3*	0.67*	3.3*	3.3*	3.3*	3.3*	4.0	13*	0.67*	3.3*	0.67**	1.1	3.3*	1.3*	1.7	13*

* Results are less than the amount indicated.

** Results are equal to but slightly less than the amount indicated.

TABLE D-4

RADIOASSAY OF SURFACE WATERS

NORTH COASTAL REGION (NO. 1)

Sta. No.	Stream	Near	Date 1964	Micro-micro curies per liter			
				Dissolved Alpha	Solid Alpha	Dissolved Beta	Solid Beta
7b	Bear River	Capetown	5-12	-0.05 ± 1.04	-0.60 ± 0.25	-1.46 ± 10.14	1.97 ± 8.87
			9-15	-0.18 --	0.07 ± 0.51	-0.45 --	0.90 ± 8.52
5d	Eel River	Dos Rios	5-11	-0.28 ± 0.55	0.12 ± 0.62	-7.68 ± 11.33	-4.71 ± 8.02
			9-1	-1.53 ± 0.80	0.21 ± 0.81	1.89 ± 11.78	1.97 ± 8.63
5	Eel River	McCann	5-12	-0.22 ± 1.34	-0.18 ± 0.60	8.11 ± 11.87	-1.80 ± 8.84
			9-15	-0.44 --	0.22 ± 0.81	7.80 ± 10.11	-1.49 --
5c	Eel River, Middle Fork	below Dos Rios	5-11	-0.02 ± 0.99	-0.21 ± 0.68	-8.12 ± 11.60	-1.04 ± 8.76
			9-1	0.45 ± 1.85	0.01 ± 0.71	-18.23 ± 12.60	-6.17 ± 8.44
6	Eel River	Scotia	5-12	-0.76 ± 0.38	-0.40 ± 0.48	-4.10 ± 10.12	5.17 ± 10.47
			9-15	0.38 ± 0.93	0.45 ± 0.96	9.52 ± 10.18	-2.72 --
7	Eel River, South Fork	Miranda	5-12	0.06 ± 1.21	-0.41 ± 0.46	3.16 ± 11.38	2.41 ± 8.88
			9-15	0.11 ± 0.74	1.15 ± 1.03	-7.67 ± 9.57	-0.70 ± 8.59
1c	Klamath River	above Hamburg Reservoir	5-6	0.35 ± 1.09	0.85 ± 1.14	6.25 ± 11.70	9.50 ± 10.59
			9-2	0.05 ± 0.74	0.74 ± 0.96	12.26 ± 10.36	7.28 ± 8.74
1f	Klamath River	below Iron Gate Dam	5-6	0.54 ± 1.27	-0.18 ± 0.60	-6.60 ± 11.42	6.03 ± 9.09
			9-2	-0.05 --	0.52 ± 0.96	-1.80 --	-3.56 --
3	Klamath River	Klamath	5-13	-0.07 ± 0.75	-0.05 ± 0.35	9.90 ± 11.43	-1.02 ± 7.82
			9-16	0.00 ± 1.56	0.00 ± 0.58	-1.78 ± 11.37	-1.86 ± 8.55
2c	Klamath River	Orleans	5-11	-0.51 ± 0.79	0.38 ± 0.90	7.43 ± 11.01	-0.92 ± 8.88
			9-14	-0.42 ± --	0.26 ± 0.89	4.81 ± 10.26	1.86 ± 8.72
2b	Klamath River	Seiad Valley	5-6	-1.44 ± 1.73	0.07 ± 0.71	-1.42 ± 13.39	-4.24 ± 8.86
			9-2	-1.02 --	-0.79 --	-3.21 --	19.46 ± 10.12
6a	Mad River	Arcata	5-11	-0.14 ± 1.01	0.63 ± 1.02	-3.57 ± 11.59	15.82 ± 12.42
			9-14	-0.32 --	0.07 ± 0.63	5.80 --	-1.17 --

TABLE D-4 (Continued)

RADIOASSAY OF SURFACE WATERS

NORTH COASTAL REGION (NO. 1)

Sta. No.	Stream	Near	Date 1964	Micro-micro curies per liter			
				Dissolved Alpha	Solid Alpha	Dissolved Beta	Solid Beta
7a	Mattole River	Petrolia	5-12	-0.52 ± 0.83	-0.58 ± 0.24	2.19 ± 10.26	-4.87 ± 7.59
			9-15	0.64 ± 1.05	0.86 ± 1.09	-0.68 --	-2.77 --
5b	Outlet Creek	Longvale	5-11	-0.26 ± 0.74	0.77 ± 1.18	-3.61 ± 11.06	0.88 ± 8.97
			9-1	-0.67 ± 0.98	0.21 ± 0.81	4.90 ± 10.20	-12.05 ± 8.26
3b	Redwood Creek	Orick	5-13	-0.31 ± 0.54	0.39 ± 1.00	-10.96 ± 10.68	4.28 ± 8.90
			9-16	0.64 ± 1.42	0.35 ± 0.90	-0.59 ± 9.87	-4.96 ± 7.57
2a	Salmon River	Somesbar	5-11	-0.70 ± 0.56	0.07 ± 1.30	7.06 ± 10.71	1.59 ± 10.45
			9-14	1.08 ± 1.37	-0.22 --	0.82 ± 10.12	0.26 ± 8.94
1b	Scott River	Fort Jones	5-5	-0.39 ± 0.68	-0.28 ± 0.44	-6.64 ± 11.40	0.19 ± 7.68
			9-1	3.25 ± 9.17	1.00 ± 1.09	20.77 ± 10.99	-3.11 --
1a	Shasta River	Yreka	5-6	0.88 ± 3.19	-0.26 ± 0.60	10.35 ± 12.86	11.61 ± 9.25
			9-2	-1.53 + --	0.52 ± 0.96	26.81 ± 13.20	-8.79 --
3a	Smith River	Crescent City	5-13	-0.53 ± 0.27	0.47 ± 0.98	-4.57 ± 9.44	8.15 ± 9.17
			9-16	0.90 ± 1.55	0.08 ± 1.00	-4.87 ± 10.91	1.33 ± 9.01
4b	Trinity River	Burnt Ranch	5-11	-0.20 ± 0.99	-1.11 ± 0.90	-3.71 ± 10.94	2.43 ± 10.40
			9-14	2.09 ± 1.90	0.26 ± 0.73	-1.39 --	-4.08 --
4	Trinity River	Hoopa	5-11	0.22 ± 1.11	0.60 ± 0.97	-1.13 ± 10.96	2.55 ± 8.98
			9-14	-0.70 --	0.33 ± 1.03	-7.90 --	-10.23 --
4a	Trinity River	Lewiston	5-11	-0.58 ± 0.27	-0.18 ± 0.60	-5.06 ± 10.63	-4.12 ± 8.64
			9-14	-0.35 ± --	0.04 ± 0.73	0.32 ± 9.87	2.53 ± 8.99
5a	Van Duzen River	Bridgeville	5-12	-0.32 ± 0.91	-0.30 ± 0.90	-28.93 ± 10.22	0.17 ± 7.81
			9-15	-0.48 --	-0.67 --	-1.30 + --	-8.63 --

APPENDIX E

GROUND WATER QUALITY

GROUND WATER QUALITY

Data presented in this appendix are measured values of selected quality characterisitcs of ground waters in the North Coastal Area, as shown on the "Area Orientation Map". The Ground Water Quality Data Program is based on systematic sampling of a predetermined network and is reported annually by water year. The Ground Water Quality Data Program is performed in cooperation with other state, local, and federal agencies.

All data presented in this volume are within the North Coastal Water Pollution Control Region (No. 1) excluding the Russian River drainage basin and the area along the coast south of the Mattole River drainage. Wells sampled in the ground water quality program are arranged by basin and tabulated in sequence by township, range, and section. The eight ground water basins sampled annually in the North Coastal Area are shown on Figure C-1 in Appendix C.

The Ground Water Quality Data Program consists of selecting locations to be sampled, collection of samples by Department personnel or cooperators, laboratory analysis by an assigned agency, examination of the data to note trends or significant changes, and publication of the data and findings.

Except where noted, tabulated values for temperature are those measured in the field at the time of sampling. Comments on local conditions are noted in the field books but are not included in the tabulation.

Tabulated values for dissolved minerals are the analytical quantity reported in milligrams per liter (mpl) and a computed value for equivalents per million (epm). Electrical conductivity is reported as micromhos at 25° C and temperature is in degrees Fahrenheit. Laboratory analyses of ground waters were performed in the Department's Chemical Laboratory at Bryte, in accordance

with "Standard Methods for the Examination of Water and Waste Water", Eleventh Edition, or by the U. S. Geological Survey (USGS). The methods yield comparable accuracy of analysis. The determination of trace elements was performed by the "wet" analysis at the Bryte Laboratory. The results are reported in parts per billion. During 1963-64 the ground waters of Butte Valley were the only North Coastal Area ground waters analyzed for trace elements.

Well Numbering System

The state well numbering system used in this report is based on the township, range, and section subdivision of the United States Public Land Survey. It is the system used in all ground water investigations and for numbering all wells for which data are published or filed by the Department of Water Resources. In this report the number of a well, assigned in accordance with this system, if referred to as the State Well Number and is described in more detail in Appendix C of this bulletin.

MINERAL ANALYSES OF GROUND WATER

State Well Number	Date Sampled	Agy. Call.	Temp when Sampled °F	pH	Specific conductance (micromhos at 25°C)	Mineral Constituents in milligrams per liter equivalents per million percent reactance volue: Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Mineral constituents in milligrams per liter: Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	TOTAL hardness as $CaCO_3$
								NORTH COASTAL REGION				10000							
SMITH RIVER PLAIN																			
16N/ 1W- 2Q 1 H	9- 1-64	5050	--	8.4	205	--	--	14 0.61	--	2 0.07	107 1.75	--	11 0.31	--	--	--	--		82
16N/ 1W-15C 1 H	9- 1-64	5050	--	7.6	116	--	--	8 0.35	--	0	41 0.67	--	13 0.37	--	--	--	--		46
16N/ 1W-17K 2 H	9- 1-64	5050	--	8.1	284	--	--	21 0.91	--	0	66 1.08	--	24 0.68	--	--	--	--		88
16N/ 1W-20A 2 H	9- 1-64	5050	--	8.0	240	--	--	22 0.96	--	0	44 0.72	--	20 0.56	--	--	--	--		63
16N/ 1W-20H 1 H	9- 1-64	5050	--	7.5	197	--	--	14 0.61	--	0	61 1.00	--	15 0.42	--	--	--	--		64
17N/ 1W- 2G 1 H	8-28-64	5050	--	7.8	110	--	--	7 0.30	--	0	46 0.75	--	7 0.20	--	--	--	--		40
17N/ 1W- 4J 1 H	8-18-64	5050	--	8.2	244	--	--	5 0.22	--	0	145 2.38	--	7 0.20	--	--	--	--		126
17N/ 1W-14C 1 H	9- 2-64	5050	--	8.5	379	--	--	30 1.30	--	10 0.33	174 2.85	--	14 0.39	--	--	--	--		122
18N/ 1W- 5G 1 H	8-28-64	5050	--	7.0	180	--	--	15 0.65	--	0	13 0.21	--	34 0.96	--	--	--	--		44

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TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

State Well Number	Date Sampled Time	Agy. Call.	Temp when Sampled °F	pH	Specific conductance (micromhos at 25°C)	Mineral Constituents in milligrams per liter equivalents per million percent reactance value: Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Mineral constituents in milligrams per liter: Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	TOTAL hardness as $CaCO_3$
NORTH COASTAL REGION (CONTINUED)																			
SMITH RIVER PLAIN														10000					
18N/ 1W-17R 1 H	8-28-64	5050	--	7.9	250	--	--	18	--	0	130	--	15	--	--	--	--		94
								0.78			2.13		0.42						
18N/ 1W-17R 2 H	8-28-64	5050	--	8.1	228	--	--	12	--	0	120	--	14	--	--	--	--		95
								0.52			1.97		0.39						
18N/ 1W-34M 2 H	8-28-64	5050	--	8.0	400	--	--	4	--	0	230	--	9	--	--	--	--		215
								0.17			3.77		0.25						
BUTTE VALLEY																			
45N/ 2W- 1P 1 M	6-22-64	5050	52	7.2	133	--	--	5	--	0	68	--	0	--	--	--	--		56
								0.22			1.11								
46N/ 1W-17B 1 M	6-22-64	5050	54	8.4	346	19	16	30	4	0	208	2	3	1.0	--	0.00	--	176	109
						0.95	1.23	1.30	0.10		3.41	0.04	0.08	0.02				208	
						27	34	36	3		96	1	2	1					
47N/ 1E-32A 1 M	6-22-64	5050	67	8.2	198	5	4	28	8	0	115	0	5	1.0	--	0.00	--	108	29
						0.25	0.33	1.22	0.20		1.88		0.14	0.02				155	
						13	17	61	10		92		7	1					
47N/ 1W-23H 2 M	6-22-64	5050	--	7.8	310	9	9	36	8	0	169	0	12	0.7	--	0.10	--	158	60
						0.45	0.74	1.57	0.20		2.77		0.34	0.01				200	
						15	25	53	7		89		11						
47N/ 2W-21H 2 M	6-22-64	5050	--	7.6	126	9	7	5	2	0	70	1	2	3.4	--	0.00	--	64	52
						0.45	0.58	0.22	0.05		1.15	0.02	0.06	0.05				128	
						35	45	17	4		90	2	5	4					
48N/ 1E-28J 1 M	6-22-64	5050	57	8.0	404	31	19	24	8	0	240	9	5	1.7	--	0.00	--	216	156
						1.55	1.56	1.04	0.20		3.93	0.19	0.14	0.03				258	
						36	36	24	5		92	4	3	1					

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MINERAL ANALYSES OF GROUND WATER

State Well Number / Date Sampled, Time	Agy. Coll.	Temp. when Sampled °F	pH	Specific conductance (micromhos at 25°C)	Mineral Constituents in milligrams per liter / equivalents per million / percent reactance value: Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Mineral constituents in milligrams per liter: Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	TOTAL hardness as $CaCO_3$
NORTH COASTAL REGION (CONTINUED)																	10000	
BUTTE VALLEY																		
48N/ 1E-30F 1 M 6-22-64 5050		54	8.2	343	-- 	-- 	22 0.96	-- 	0 	204 3.34	-- 	3 0.08	-- 	-- 	-- 	-- 		128
48N/ 1E-30N 1 M 6-22-64 5050		--	8.1	437	18 0.90 20	26 2.14 47	28 1.22 27	12 0.31 7	0 	221 3.62 80	21 0.44 10	12 0.34 8	6.7 0.11 2	-- 	0.00 	-- 	232 271	152
48N/ 1E-36J 1 M 6-22-64 5050		54	7.8	1300	37 1.85 12	68 5.59 37	160 6.96 46	30 0.77 5	0 	843 13.82 91	27 0.56 4	25 0.71 5	7.3 0.12 1	-- 	0.20 	-- 	769 818	372
SHASTA VALLEY																		
42N/ 5W-20J 1 M 11- 3-64 5050		--	7.7	338	-- 	-- 	22 0.96	-- 	0 	195 3.20	-- 	6 0.17	-- 	-- 	-- 	-- 		126
42N/ 6W-10J 1 M 11- 3-64 5050		--	7.7	583	-- 	-- 	4 0.17	-- 	0 	382 6.26	-- 	4 0.11	-- 	-- 	-- 	-- 		325
43N/ 6W-21R 1 M 11- 3-64 5050		--	7.8	484	-- 	-- 	8 0.35	-- 	0 	300 4.92	-- 	2 0.06	-- 	-- 	-- 	-- 		247
44N/ 6W-22K 1 M 11- 3-64 5050		--	7.3	450	49 2.45 52	16 1.32 28	20 0.87 19	2 0.05 1	0 	228 3.74 81	8 0.17 4	15 0.42 9	16.0 0.26 6	-- 	0.20 	-- 	238 238	189
45N/ 5W- 6E 1 M 11- 3-64 5050		--	7.8	961	8 0.40 4	4 0.33 3	210 9.13 92	2 0.05 1	0 	550 9.01 91	0 	30 0.85 9	1.9 0.03 	-- 	7.40 	-- 	534 584	37
45N/ 6W-19E 1 M 11- 3-64 5050		--	8.1	475	-- 	-- 	50 2.17	-- 	0 	196 3.21	-- 	2 0.06	-- 	-- 	-- 	-- 		128

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TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

State Well Number	Date Sampled Time	Agy. Coll.	Temp when Sampled °F	pH	Specific conductance (micromhos at 25°C)	Mineral Constituents in milligrams per liter equivalents per million percent reactance value: Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Mineral constituents in milligrams per liter: Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	TOTAL hardness as $CaCO_3$
NORTH COASTAL REGION																			
HAYFORK VALLEY																			
31N/12W-12L 1 M	7-29-64	5050	--	7.1	228	20	12	8	1	0	112	6	6	11.0	--	0.00	--	119	100
						1.00	0.99	0.35	0.03		1.84	0.12	0.17	0.18				140	
						42	42	15	1		80	5	7	8					
31N/12W-15K 1 M	7-29-64	5050	--	7.5	248	44	1	10	0	0	148	1	6	1.6	--	0.00	--	136	114
						2.20	0.08	0.43			2.43	0.02	0.17	0.03				151	
						81	3	16			92	1	6	1					
MAD RIVER VALLEY																			
5N/ 1E- 4H 2 H	7-16-64	5050	--	8.7	391	46	6	30	3	11	182	2	28	2.1	--	0.10	--	218	140
						2.30	0.49	1.30	0.08	0.37	2.98	0.04	0.79	0.03				233	
						55	12	31	2	9	71	1	19	1					
5N/ 1E- 8J 1 H	7-16-64	5050	--	8.1	315	--	--	28	--	0	151	--	--	--	--	--	--		91
								1.22			2.47								
6N/ 1E- 7M 1 H	7-16-64	5050	--	8.4	456	--	--	14	--	4	225	--	29	--	--	--	--		209
								0.61		0.13	3.69		0.82						
6N/ 1E- 8H 1 H	7-16-64	5050	--	7.4	214	12	4	18	4	0	28	9	18	48.0	--	--	--	127	47
						0.60	0.33	0.78	0.10		0.46	0.19	0.51	0.77				179	
						33	18	43	6		24	10	26	40					
6N/ 1E-17D 1 H	7-16-64	5050	61	7.3	397	--	--	9	--	0	219	--	11	--	--	--	--		187
								0.39			3.59		0.31						
6N/ 1E-19Q 1 H	7-11-64	5050	--	8.5	387	--	--	10	--	6	212	--	11	--	--	--	--		186
								0.43		0.20	3.47		0.31						
6N/ 1E-30N 1 H	7-16-64	5050	--	7.9	380	--	--	9	--	0	211	--	11	--	--	--	--		175
								0.39			3.46		0.31						

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TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

State Well Number	Date Sampled Time	Agy. Coll.	Temp when Sampled °F	pH	Specific conductance (micromhos at 25°C)	Mineral Constituents in milligrams per liter equivalents per million percent reactance value: Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Mineral constituents in milligrams per liter: Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	TOTAL hardness as $CaCO_3$
NORTH COASTAL REGION (CONTINUED)																			
MAD RIVER VALLEY																			
6N/ 1E-32F 1 H	7-16-64	5050	--	8.5	755	--	--	128 5.57	--	7 0.23	263 4.31	--	98 2.76	--	--	--	--		83
6N/ 1W- 1H 1 H	7-16-64	5050	--	7.0	132	--	--	14 0.61	--	0	23 0.38	--	18 0.51	--	--	--	--		23
7N/ 1E-30B 1 H	7-16-64	5050	--	7.3	163	--	--	9 0.39	--	0	33 0.54	--	7 0.20	--	--	--	--		53
EUREKA PLAIN																			
3N/ 1W- 5K 1 H	7-16-64	5050	64	7.9	145	--	--	14 0.61	--	0	55 0.90	--	14 0.39	--	--	--	--		40
4N/ 1W-16H 1 H	7-16-64	5050	59	8.6	535	--	--	32 1.39	--	8 0.27	260 4.26	--	28 0.79	--	--	--	--		209
5N/ 1E-18Q 1 H	7-16-64	5050	--	8.9	858	22 1.10 13	11 0.90 11	146 6.35 75	5 0.13 2	26 0.87 10	288 4.72 52	1 0.02	120 3.38 38	1.3 0.02	--	1.80	--	476 526	100
5N/ 1E-20Q 1 H	7-16-64	5050	--	7.8	278	--	--	24 1.04	--	0	109 1.79	--	30 0.85	--	--	--	--		85

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TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

State Well Number	Date Sampled, Time	Agy. Coll.	Temp. when Sampled °F	pH	Specific conductance (micromhos at 25°C)	Mineral Constituents in milligrams per liter equivalents per million percent reactance volue: Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Mineral constituents in milligrams per liter: Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	TOTAL hardness as $CaCO_3$
EEL RIVER VALLEY								NORTH COASTAL REGION					10000						
2N/ 1W- 4D 1 H	7-29-64	5050	59	8.2	389	--	--	9 0.39	--	0	179 2.93	--	7 0.20	--	--	--	--		182
2N/ 1W- 7F 1 H	7-16-64	5050	57	8.5	450	--	--	16 0.70	--	5 0.17	166 2.72	--	22 0.62	--	--	--	--		196
2N/ 1W-17G 1 H	7-16-64	5050	55	8.3	703	--	--	60 2.61	--	0	245 4.02	--	79 2.23	--	--	--	--		223
3N/ 1W-29G 1 H	7-16-64	5050	59	8.5	532	--	--	25 1.09	--	10 0.33	252 4.13	--	22 0.62	--	--	--	--		232
3N/ 1W-30N 1 H	7-16-64	5050	64	8.3	561	--	--	10 0.43	--	0	288 4.72	--	13 0.37	--	--	--	--		280
3N/ 2W- 2A 2 H	7-16-64	5050	57	8.2	2020	88 4.39 24	79 6.50 36	168 7.30 40	2 0.05	0	82 1.34 7	27 0.56 3	584 16.47 89	10.0 0.16 1	--	0.00	--	998 1340	545
3N/ 2W-13J 1 H	7-29-64	5050	60	8.4	1990	127 6.34 34	92 7.57 40	109 4.74 25	4 0.10 1	4 0.13 1	156 2.56 14	19 0.40 2	540 15.23 83	2.6 0.04	--	0.30	--	975 1510	696
3N/ 2W-27G 1 H	7-16-64	5050	58	8.2	7440	368 18.36 25	166 13.65 18	960 41.74 56	24 0.61 1	0	246 4.03 5	182 3.79 5	2380 67.12 89	13.0 0.21	--	0.20	--	4214 4920	1602
3N/ 2W-35M 1 H	7-16-64	5050	56	8.6	1230	69 3.44 29	47 3.87 33	95 4.13 35	16 0.41 3	10 0.33 3	220 3.61 30	37 0.77 6	254 7.16 60	7.4 0.12 1	--	0.30	--	644 818	366

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TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

State Well Number	Date Sampled	Agy. Coll.	Temp. when Sampled °F	pH	Specific conductance (micromhos at 25°C)	Mineral Constituents in milligrams per liter equivalents per million percent reactance value									Mineral constituents in milligrams per liter				
						Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	TOTAL hardness as $CaCO_3$
								NORTH COASTAL REGION				10000							
ROUND VALLEY																			
22N/12W- 6L 2 M		--	--	8.6	368	42	13	21	1	6	216	9	4	3.1	--	0.30	--	206	159
8- -64	5050					2.10	1.07	0.91	0.03	0.20	3.54	0.19	0.11	0.05				223	
						51	26	22	1	5	87	5	3	1					
22N/12W-19F 1 M		--	--	8.8	476	39	39	10	0	19	261	24	4	3.7	--	0.30	--	267	258
8- -64	5050					1.95	3.21	0.43		0.63	4.28	0.50	0.11	0.06				294	
						35	57	8		11	77	9	2	1					
22N/13W- 1J 3 M		--	--	8.6	303	29	8	26	0	6	158	11	10	3.4	--	0.30	--	171	106
8- -64	5050					1.45	0.66	1.13		0.20	2.59	0.23	0.28	0.05				186	
						45	20	35		6	77	7	8	1					
22N/13W-12K 1 M		--	--	8.4	377	30	19	21	1	3	210	6	7	0.7	--	0.10	--	191	153
8- -64	5050					1.50	1.56	0.91	0.03	0.10	3.44	0.12	0.20	0.01				210	
						38	39	23	1	3	89	3	5						
22N/13W-13A 1 M		--	--	8.4	241	29	10	8	1	4	138	4	4	2.6	--	0.30	--	131	114
8- -64	5050					1.45	0.82	0.35	0.03	0.13	2.26	0.08	0.11	0.04				146	
						55	31	13	1	5	86	3	4	2					
23N/12W-31N 1 M		--	--	8.4	245	27	11	9	1	2	134	12	3	1.4	--	0.00	--	132	113
8- -64	5050					1.35	0.90	0.39	0.03	0.07	2.20	0.25	0.08	0.02				146	
						51	34	15	1	3	84	10	3	1					
23N/12W-33L 1 M		--	--	7.9	649	64	34	30	1	0	420	0	3	4.1	--	0.10	--	343	300
8- -64	5050					3.19	2.80	1.30	0.03		6.88		0.08	0.07				370	
						44	38	18			98		1	1					
23N/13W-25P 1 M		--	--	8.1	236	31	9	5	1	0	130	11	3	1.9	--	0.00	--	126	115
8- -64	5050					1.55	0.74	0.22	0.03		2.13	0.23	0.08	0.03				145	
						61	29	9	1		86	9	3	1					
23N/13W-36P 2 M		--	--	8.4	248	28	11	6	0	4	126	6	4	13.0	--	0.00	--	134	115
8- -64	5050					1.40	0.90	0.26		0.13	2.07	0.12	0.11	0.21				157	
						55	35	10		5	78	5	4	8					

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TABLE E-2

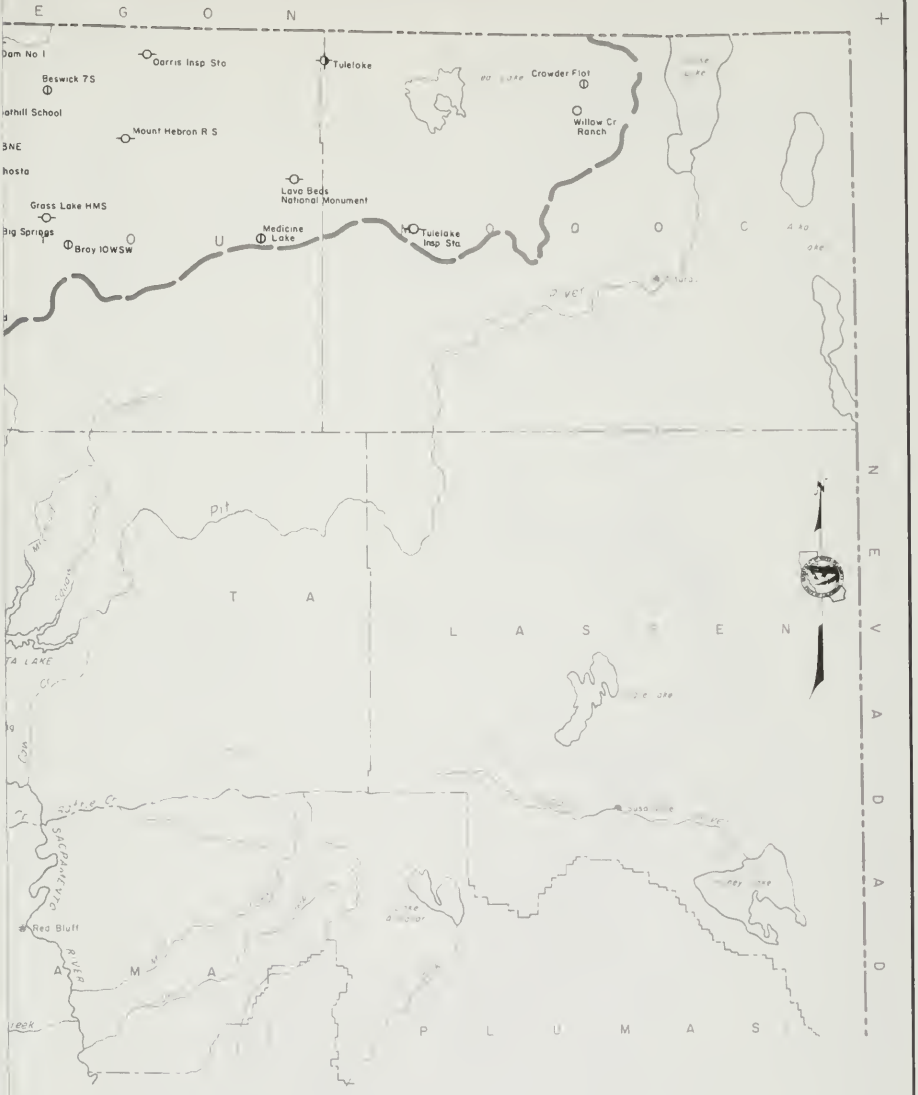
TRACE ELEMENT ANALYSES OF GROUND WATER

1964

NORTH COASTAL REGION (No.1)

BUTTE VALLEY (1-3)

State Well Number (MDB & M)	Date Sampled	Constituents in parts per million					
		Aluminum	Copper	Iron (total)	Lead	Manganese	Zinc
45N/2W-1P1	6-22-64	0.02	0.01	0.09	0.00	0.00	0.02
47N/1E-32A1	6-22-64	0.02	0.07	0.04	0.00	0.02	0.00
47N/2W-21H2	6-22-64	0.03	0.02	1.2	0.01	0.00	1.0
48N/1E-28J1	6-22-64	0.01	0.01	0.01	0.00	0.00	0.00
48N/1E-30F1	6-22-64	0.00	0.01	0.00	0.00	0.03	0.01
48N/1E-30N1	6-22-64	0.04	0.02	0.01	0.00	0.00	0.02
48N/1E-36J1	6-22-64	0.01	0.01	0.02	0.00	0.01	0.00



LEGEND

- PRECIPITATION ONLY
- PRECIPITATION AND TEMPERATURE
- PRECIPITATION, TEMPERATURE AND EVAPORATION

TYPE OF GAGE

- NON RECORDING
- RECORDING
- BOTH TYPES
- STORAGE

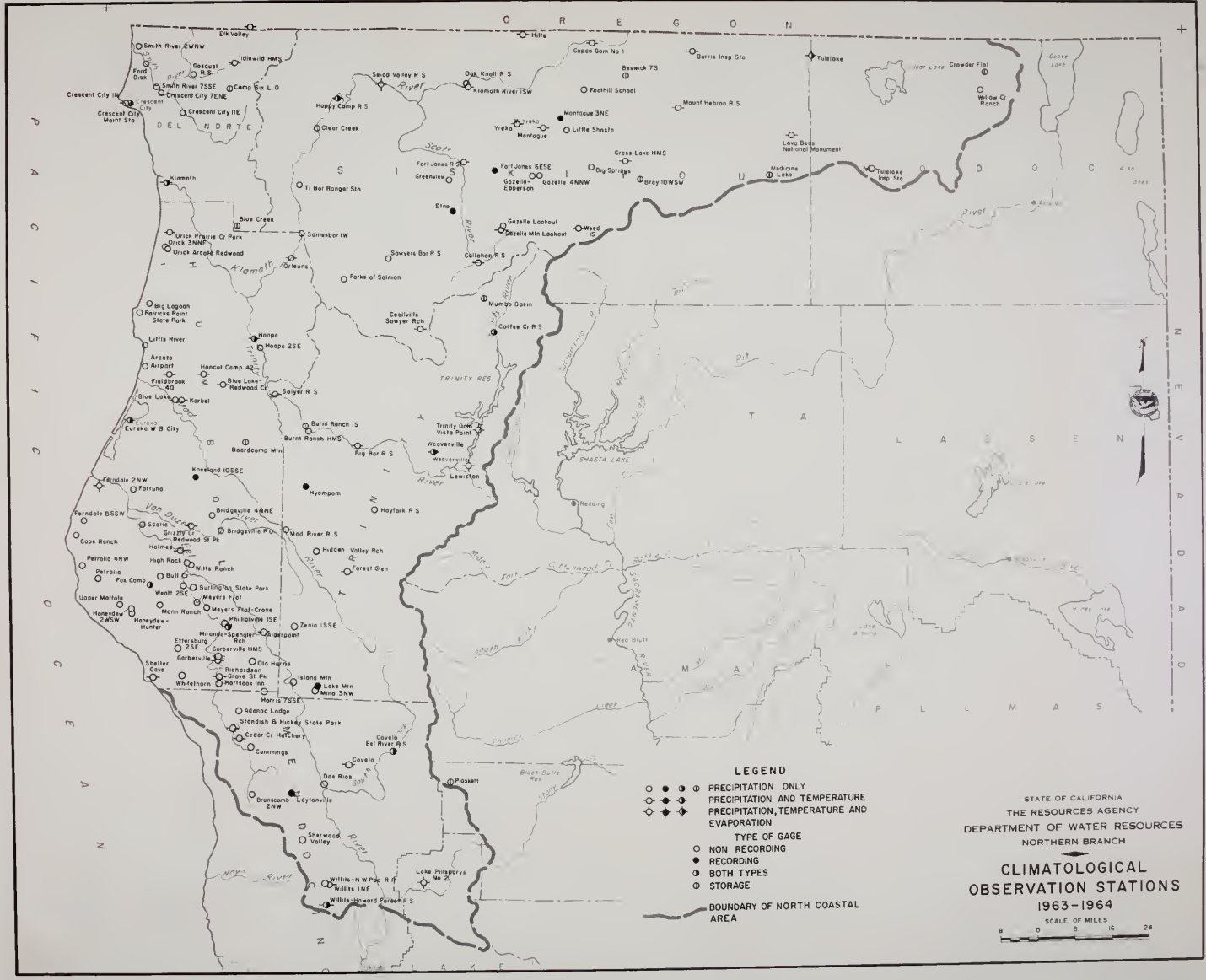
BOUNDARY OF NORTH COASTAL AREA

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
NORTHERN BRANCH

CLIMATOLOGICAL OBSERVATION STATIONS 1963-1964

SCALE OF MILES
8 0 8 16 24

PLATE I



LEGEND

PRECIPITATION ONLY
PRECIPITATION AND TEMPERATURE
PRECIPITATION, TEMPERATURE AND EVAPORATION

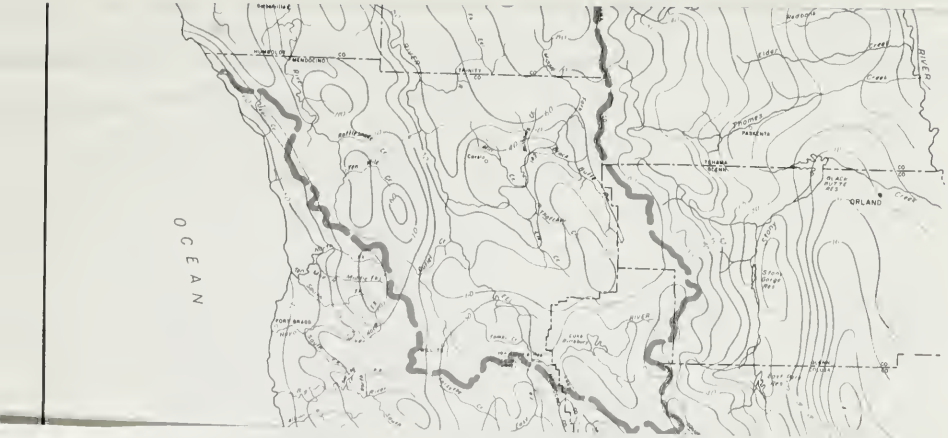
TYPE OF GAGE
NON RECORDING
RECORDING
BOTH TYPES
STORAGE

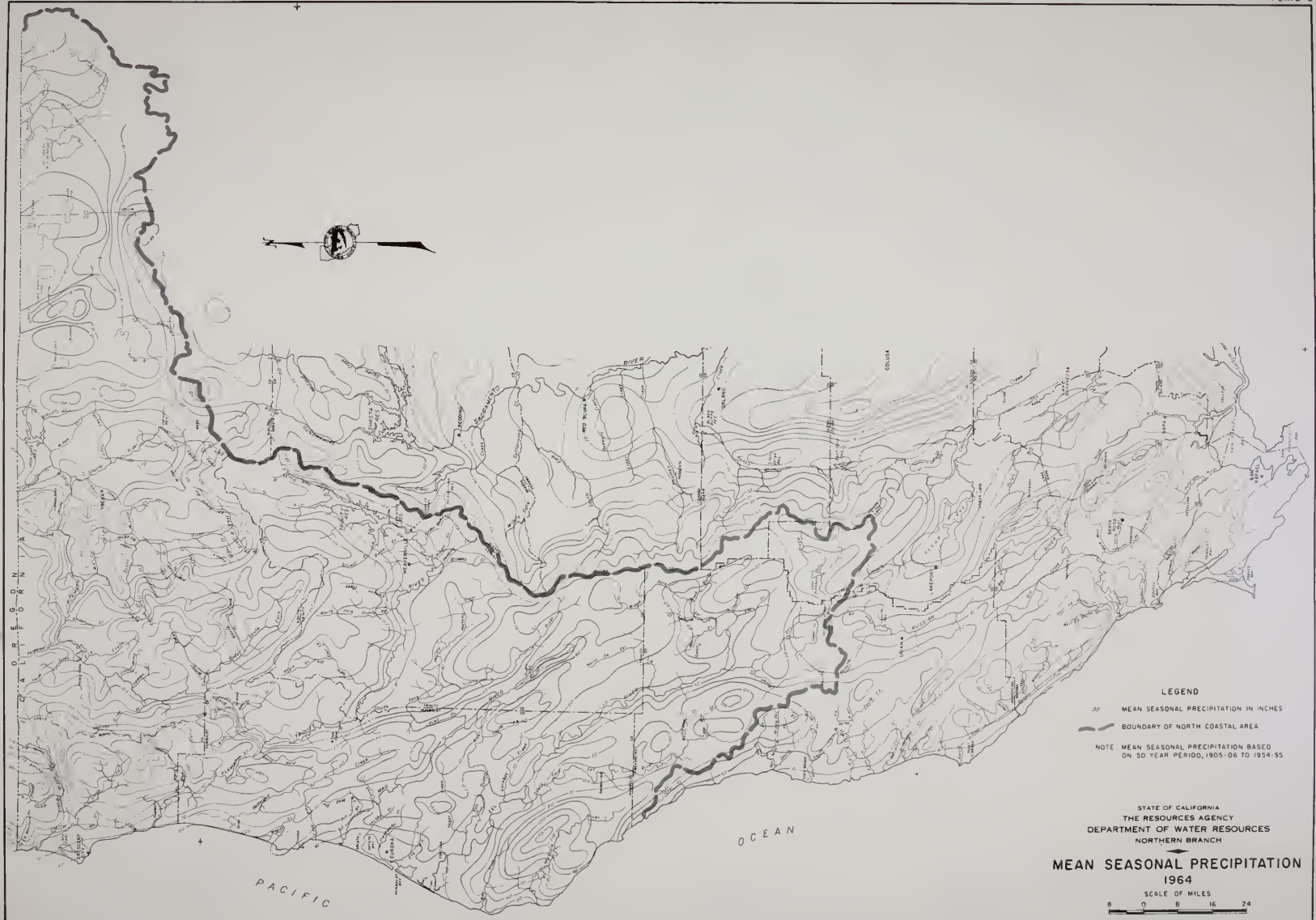
BOUNDARY OF NORTH COASTAL AREA

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
NORTHERN BRANCH

CLIMATOLOGICAL OBSERVATION STATIONS
1963-1964

SCALE OF MILES
8 0 8 16 24


OCEAN
RIVER
ORLAND


CALIFORNIA
OREGON
PACIFIC
OCEAN
SACRAMENTO
RIVER
COLUSA
YUBA
BUTTE
GLENN
TEHAMA
SHASTA
TRINITY
HUMBOLDT
DEL NORTE
LEGEND
30 MEAN SEASONAL PRECIPITATION IN INCHES
BOUNDARY OF NORTH COASTAL AREA
NOTE MEAN SEASONAL PRECIPITATION BASED ON 50 YEAR PERIOD, 1905-06 TO 1954-55
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
NORTHERN BRANCH
MEAN SEASONAL PRECIPITATION
1964
SCALE OF MILES
8 0 8 16 24